### ADMINISTRATION REPORT

ON THE

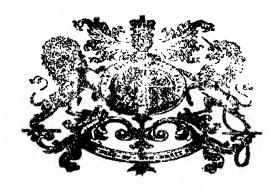
# RAILWAYS IN INDIA

FOR THE

# Calendar year 1906

BY

### THE RAILWAY BOARD.



Dated the 20th May 1907.

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### APPENDIX 1.

List of open lines of Railway at the close of the chlendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

			denote				LENG	ERO HE	ATT WAY,	IN MILP RAG HÉA	R, OFF	m on 31s Chastri	et Dace	жи <b>ек</b> 1	HO6.	
Nu		Name of Railway.	usrd to of rai.way	Bailway administra- tron by which worked.	Date of first opening of any portion for traffic.	Gauge.	work	lmes  a by acy of	Guaran- te-d rollway-	(-)	1 111-	Lines on States az	and west		t in foreign	Rewares.
Main head.	Sub-		Letters				rail- nay.	Com- paby.			wy.	State at 11f.	Prints	rad vary	1. 1 e 4	
		A		1									1			
5	(b)	Agra-Delhi Chord,	A.D.C	Great Indian Penin- sula Ry. Co.	15-11-03	5' 6"	-	125:90		<u></u>						
2	(g)	Ahmeduliad-Dholks	1	Rombay, Baroda	23-2-03	3′ 3]"	i			83.20						
2	(h)	Ahmedabad-Paran-	A.P.	,	1-6-97	3, 35,				51.73						Rebate lines.
9	(h)	Amritaar-Patti .  Assata Bengal .	1. Р. Т. А. В	North Western State Ry, Assam-Brugal By	21.9-16	5' 6" 3' 3'''		775-26		27:10						ļ;
11	(u) (b)	Azhikal-Mangalote	A M.	Co Madras Ry Co	1-7-05 21-9-06	5' 6"		56:35								
		В	}							ĺ					İ	
24	()	Bara et-Basirbat' Light	B B.L.	Burnset-Basirhat Light R. Co	1-2-05	2, 2.,				20 OK						Subsidized by District Board.
25 22	(a) (b)	Barsi Ligid Bellary-Rayadrug .	B. L. B. U.	Barsi Light Ry Co Southern Mahratta Ry, Co.	1-3-97 1-7-05	3, 35,,		33 35		78'3'						Government land provided
12	(a)	Bengal and North- Western.	B. A N · W	Bengal out North-	2-3-H1	3' 37"				942.18						Government land provide
13	(u)	Reng il-Donars .	в. Б.	Bengal Dooare	15-1-93	3' 31"	<i></i>			36.10						free. Subsidized by District Board.
13	(4)	Bengal-Popars Ex- tensions	B, D, E,	Ky. Co.	20-1 00	8' 32"				116:50						Government land provide
1	(a)	Bengal-Nagpur .	B N.	Bengal-Nagpur Ry, Co.	1440	5' 6"		1,60 % 61								free.
8	(b)	Bezwala Extension	B. E	Nizum's Guaranteed State Kys. Co.	10-2-69	5' 6"		20 58								
14	(a)	Bhavnagar-Gond d- Junagad-Porbaud a	в. с. ј Р	Blevannger Gon lat- Jenagad-Porbandar Ry.	20-12-80	1,35					-	334-19				Includes 5:23 miles of doc estate and quarry huse.
		(British section).	i	{	1-6-52	6' G"		13:11								
	(c)	Bhopel-Itarsi (Native State	В 1.	Great Indian	15-11-# <b>1</b>	5′ 6″		ļ					44:29	١.	] !	
5	(J)	L section). Bhopal-Ujjain .	<sup>)</sup> в. с	Prumsula Ky.	11-11-05	5'6"							113.7		٠	
18	(b)	Bikaner	J. B B	Jodhpur-Bikane: Ry	9-12-01	3, 55,,	1		! .			245 35				
5	(-)	Ama-Goona-Digan.	в. с. в.	Great Indian Peniu-	z::-9-95	5' 6"					}		145:63		.,	
22	(c)	Birur-Shinioga .	в, s. с	Southern Mahratti Ry. Co.	1-12-99	3' 81"		i				ļ	37 02			1
2	(a)	Bombay, Baroda and Contral India.	B. B. & C. 1	Bambay, Buoda and Central Indea By. Co.	19-2-80	i. 64		F01:25	 							Included 39 23 miles of 3' 15" range bue botween Virangem and Wadb
26	(a)	Bukhtiarpore-Bebar Light.	в. в.	Bukhtiarpore-Behar	1-7-04	2' 6"				18.50						wan, Sabaidized by District
15	(a)	Burms	B.	Light Ry. Co. Burma Railways Co.,	2-5-77	3/ 3 <u>]</u> "		1,310.15			ļ 					Board,
•		C Cawnpore-Burhwal	a n 4											İ		
10	(e)	(metre gange link).	С. В. М.	Ondh and Rolul- khand State Ry.	21-11-90	3' 93"	79.0)									Excludes 3 40 miles of the Lucknov-Bare ily rail- way between Aushingh
						Ì		1		•						and Daliganj, worked
										,	1	1				nules of mixed (5' 6' and 3' 13") gauge line be- tween Burhwal and Bars
						j		Ì				ĺ	1			ttanki and 6.50 mile on the Cawnpore Bridge of the Oudh and Rohil-
3	(1)	Conch-Behar	C. B.	Eastern Bongal State	15-9 93	2' 6"								38 60		khand State Railway.
27	(a)	Cutch	C.	Ry. Cutch Ry.	19-5-05	2' 6"	ļ		"			11:07			•••	
		D				- "	"		"			11.67	***			
9	(f)	Dandot Light .	D. L.	North Western State Ry.	5-7-80	2' 0"	6.18									
35	(a)		D. II.	Darjeeling -Hima-	23-8-80	2'0"				51.00						Subsidized by the Local
4	(8)	yan. Delhi-Umballa-	D. U. K.	layan Ry. Co. East Indian By. Co.	1-3-91	5' 5"				162-36		,				Government.
16	(a)	Kalka. Deoghur	D.	Deoghur Ry. Co.	23-12-82	3' \$}"	. "	. "	. <b>""</b>			γ	•••	"	•••	Subsidized by the Govern- ment of India.
					*** ***-0*	2 31				4'79				"	***	Government land provided free.

### APPENDIX 1-contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

			- Jenn				Large	CIC UP RA	ILWAY, I		OFRE	CF7847E1 On 3141	DECEMI	REH (9)	06,	
N t		Name of Radway.	: , ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Endway administra- tion by which worked,	Date of hest opening of any portion	ttauge.	State Work ngen	lines ed 19	Gnares:	Anmet	Un.	at ites	wred by and work gency of		20 m	Kemadke.
Main .	- Lang		Left .		traille.		Sinte ral way.		tred	radway.	Col.	Native State itseil.	Com-	State into	Inex B	
	-			-	3		1						-			<u>-</u> <u>.</u>
		D-concld.			Brought	ferwarf:	65.78	1,563 67		1,542 (4		601.21	341-10	ts ce		
11	13:	Physigsdia	рик	Libaveagur Gerdel- Jungar-Poinan ear Ry	1-6-08	aragiri			· · ·			2 /83			,	
17	(a	Dibru-bady (	1) 5	A seco - Radways and Troping Co	Aug 82	3" 97"				;7:50			(			Subshized by Local Government.
		E		r	,											
		Firstein Bergel biate - ( Behar, Kaunia- ( Diodor and	, 1	. (	24-6	3' 8' "	caseas									
3	(8)	Northern rec- tions.  Bullish section, Southdraway			14750	ar gr	55 03									
		Ranagh a-Kri h rangin a d Tee ta-Kan yram otanche:		Factora Bengal     State dv.												
3	(a)	Ducen section .	FES		4 -6 2-1-2	31 32 1 61 61	85 9 ° 497 9.									
		Central, Pastern and Southern sections.		}					•••							,
4	(a)	East Indian	Е Г.	Be Cladies Ty, Co	15851	f' 6"		2,165103								
		G	<i>a</i>		1.4											}
2	/ (e)	Gackwar's Dabbot Gackwar's Melicuit	G D	Ber boy, Boreda	8 4 7 t	2' 6" 3' 3"							02 63			
2		Godher-Putling		Ind a ffy. Co.	10-1 90	5′ 6 ′		141 14								
5	<b>(</b> 11	Negda,  Gent Indam Penin sula.	. 1. Ն.	G.est Indien Penus enla Ry Co.	18 473	5' 6°		1,501:63					•••	<b></b> .		
22	(a ;:	Guntakal-Mysori Szorter,	а. м. г.	Southern Malinath, Ry, vo.	1-142	3': ặ"	-	119 5.)								
5	6)	Gwahar Light . H	G, 1	Great It dian Petain- sula hy Co.	2-12-10	2' (."							183:53		•••	
10	(3)	Hardwar-Debra .	11, 1)	Oudh joil Relat-	1-1-00	5′ 6″	. <b></b>		32 G4							Guaranteed under modern
22	(c)	Hindapur (Yestart	11.	khand State Ry.	15-12-92	3 3%"			·			•••	51·35			contract.
22	( <i>f</i> )	pur-Mysono Fich tier), Hospet-Kottar .	u. K.	Southern	1-4 05	3'32"		46.03			,					
36	(a)	Howrah Amta	Н, А.	Howrah-Areta Light Ry Co.	1-7-97	2'0"				37 19						1
37	'a)	Light. Rowrah-Sheakhala	н. s.	Howrah-Shenkhala	2-8-07	2′ 0″				10.75	•	•••				Subsidized by District Board.
Ú	(c)	Inght. Hydernbad-Goda-	11. G. V	Light By, Co.	21-10-69	a' 8 <b>1</b> '						•••	391.13	٠,,,,	,	Includes 5.83 miles of
	,-,	vari Valley.		State Ris. Co.		-										Includes 5.83 miles of mixed (5° 6° and 3° 36") gauge line between Hydorahad and Secun- derahad over which the Nisam's Gustanteed State railway trains also-
C	<b>(F</b> )	Indiau Midland .	I. M.	Great Indian Ponin- sula Ry. Co.	10-1-79	5' 8"		809-88				•••				work.
					Carried	OAGL *	1,357*07	9,406-88	33-04	1,676-48		612 04	1,154-22	83.60		

### APPENDIX 1-contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

			denote				Langi	ин ор к Смо	ATLTV* Y,	AL HEAL	7, Org	N 04 316	T DECEM	ess l	ю,	
N U I		Nume of Railway.	nand to d of rishways.	Radway administra- tion by which	Date of first opening of any	Gange,	State   works	ed by	Gormo	Assist-	Un-	States	ened by I and work	Native led by	foreign	Remares.
Main bead.	head.		Letters no same of	worked.	partion for traffic.		State 1 al- way.	Com- pany.	tted railway.	railway	ed Tail- Waj.	Native State theif.	Com- pany,	Binte full- way.	lines in territory.	,
		J			Brought	orward	1,357 07	9, 164188	32 04	1,676 45		612 04	1,104 22	33.90	,	
2	(ر.		J. S. M	Bambay, Baroda and	10-11-05	3′ 32′′				٩			32:19			
0	(e)	dhopur).  Jammu and Kash nur ( Vative State section).	Ј. К.	Central India Ry. Co. North Western State Ry.	15-3-60	5' 6''							,,	15 99		The British section of this railway forms an integral portion of the North
14	(c)	Jamuagur	J. N.	Bhaynagar Con- (	5-1-07	3, 53	}					5121				Western State milway, Includes 3 93 miles of
14	(d)	Joialsus-Rajkot .	J. R.	Porbander Ry.	12-4 9-1	3, . 3.,						16 21				dock estate lines.
18 18	(a) (+)	Jodhpur Jashpur-Hyderas bod (British sec- tion).	J. B. J. H.	Jodhpur-Bikaner {	24 6 52 18 8-9.	2, 34,,		123 f H				1630				Worked by the Jodh jour Bikener reliway The Native State section
38	(u)	Jornat	J.	Jorint By	15-12 # 1	2. 0"	31 75					• ,				of the railway forms and
1	(6)	Jubbaly ore-Gouder Extension.	J.G. E	Bengal-Nagpur By	18 4 03	7. 6.		245 05					•			Jadlipur enilway.
30	(a)	Kalka-Simba .	кs	Pelhl Umballa-	9-11-63	5.6		69:14				]				İ
21	( <i>i</i> -)	Karaikkai-Peralam	к. г.	Kelka Ry Co. South Indian Ry.	14-3-96	3, 37									14.65	l
9	(A)	Khushalgath-Ko hai Thol.	к. кт	North Western State Ry.	25.5 91	2 6"	el 73									
C 22	(e) (y)	Kolar Gold-holds . Kallerpur	K G K L.	Madras Ry C Southern Malcratta Ry, Co.	1.0 · 3 21.4 01	3' 37"							20 27			
17	(i)	La Lodo and Tikak-	L. T.	Assau Railways	17 2-84	3 /4"					8 60					
20	(l)	Margberita Col- bery Lucknow-Bare, By	L. B	and Trading Co. Robilkund and Ku	12-10-54	3 57"		237:04	İ			<b> </b>			١.	
v	(d,	I ndhana Dhuri- Jakhat, <b>M</b>	L. D. J	maon Ry. Co. North Western State By.	10 1-01	£' 6"								79.65		
6	(a)	Madras	M.	12 3 4 5 9 5	1756	5′ 6°			904'61							inaranteed underold con
6	(d)	Midras (North- East buo).	M.N.E.	Madros Ry, Co.	20-2-93	5′ 6''		497 19								tract. It coules 199 miles of mixed of of and 3/28 gauge line between Bezwein and Rictin Unel had and 1/99 miles of 3/3% gauge line buttered.
	(g)	Morappur-Dhar-	M. J.	Madias Ry. Co	14 1 00	2' 6"	_	18 63								Tadepald.
19	(a)	mapari. Morvi	M,R.W	Morvi Ry.,	11-7-46	3' :}"				<u>.</u>		7101				•
1	(e)	Mourbhauj	M.B	Bengal-Nappur Rv	24-387	2'6"		:::	-:	:::		20.70	32.41	:::	:::	1
3	(c)	Mymonsingh Jamal pur-Jagannath-	M.J.J.	Co Essicin Bengel State Ry.	15-10-94	3.48,				53-22			-			Rebate line.
22	(4)	Mysore-Nanjangud	1	Southern	1 12 91	i		•••					15 90			1
22	(*)	Mysore Section (Bouthern Muh- ratiu).	M.S.	) Ry, to (	1-2 81	3':4"	"	200 23				-				
2	(0)		N. U.	Bombay, Baroda	15-7-96	p, c							34.34		.	
6	(0)	Nılgiri	N.	Mailras Ry. Co.	15 6-99	3, 55.,		16.00								
8	(a)	Nizam's Guaran- terd State.	N. G. 8	Nigam's Guaran- ted State Rvs. Co.	9-10-74	5'6'				-			33013			Includes 6:2? miles of mix ed. 5:6" and 3'.4") gaugine between Hydernba and Secunderabed over high the Released
9	(a)	North Western State,	N.W.		13-5-61	£, 4,,	4,371.71						7.			which the Hyderabad Godavari Valley railwa trains slee work. Includes 5 c3 miles of mil- tary line not used for public traffic and 36 g
				North Western -												miles of mixed 5'e' an 3'3\frac{1}{2}') gauge line betwee Bhatlada and Kot Kapi ra, over which he Ra
	m	1	N.D.	. }	1-1-01	2' 6"	49.25									putana-Malwa railwa traius also work.
10	(a)	Oudh and Robil- khand State.	0. & R	Oudh and Robble khand State Ky.	23-1-67	£' 0'	7,212:50				-	-				mixed (5' 6' and 3' 81'
																gange line between Burl wal and Hara Banki an 3:59 mile on the Cawnpoi Bridge and 1:81 miles of 3'34" gange, between th Oudh and Rohilkhan
	-	1					-	-	-	-	-	-	-		-	ment and the Bongal at
		1	1		Carrie	d over	6,105.0	7 10,903	30 986	1,729-7	0 8.6	0 1,271.0	0 :,638-2	1 129-2	3 14.6	oity station at Benares.

### APPENDIX 1-concld.

List of open lines of Railway at the close of the calcular year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

N vi			den. te		i	ı	1. 88 (1)	111 111 113	ILWAY, I	G WILLY	477 874	ON OINT	LICKER		).	
			RHANKE	AL HEUD	A DE C	LASSIFICA	TION.									
	•	Name of Railway.	uced to	Railway administra- tion by which	Date of first opening of any	Gange.	>tate works	of by			Un-	States	rurd by N and work	ative ed by	foreign	Remaren.
	-	in in in in in in in in in in in in in i	0 25	workent.	for for traffic.	Anna.		., 0.	tinaran- ted radway.	ed	48522 t 6.d 18.d-		genny of		A 1.	
Recd	Bub.		Letter:		er erite.		State ran- way.	Сэп- раву			way.	Native State itself.	Com- pany.	State rail- way.	Lines i	
		P		, ,, ma,,,	Bronght	orward,	0.105 07	10,903 3	936 05	1,720.70	H 50	1,271.00	1,638 21	128.24	11.62	
2	(k)	Palanpur-Decsu .	1. D.	Rombae, Baroda	14-11-93	3' 3;"		17:28								
		Parlakimedi Light	P.L.L	nnd Central India Ry, Co		2' 6''	l									This line is the joint pro- perty of Government and the Palanpur Dur-
1 2	(d)	Petlad- Cambay	P.C.A.	Brognt-Nagpur Ry. Co.	1.4-00	5' 6"		<i>"</i> "					24.02	•••		bar.
1	,,	(Anand-Tarapur section), Petind Cambay	P.C.T.	Bombay, Baroda and Central India Rv. Co.				1								
2	(e)	(Ta. apar-Cambay	P.C.1.	, (	20-6-01	5′ 6″							12:30			
21	(e)	Pondh herry	P.	South Indian Ry.	15-12-70	3, 35									7 95	
20	(e)	Powayan Light . R	P.W.L	Bolckund and Kumaon Ry. Co.	17-6-90	2' 6"				39.50	"		•••	•••		Government land provided free.
		-		D No sour He	10.000	£ 6"		Form 4								
1 2	(t)	Raipur-Dhamtari . Bajpipla	R, D. R.	Bengal-Navpur Ry. En. Burdony, Baroda	10-9-00	2' 6"		56*94	 				37:37	•••	•••	
	(0)			nent Central India Ry Co		•									***	_
9	(r) (l)	Rajpura-Bhatinda Rajputana-Malwa ,	R. H. R. M.	Ry. Bombay, Earoda and	1	3, 354		1,774:30	<u>.</u>					107 05		
	(4)			Central Inductry. Co.												Includes 2:10 miles at Uj- jam, 3:07 miles between Agramationment and Agra Eset Back stations and 0:94 mile between Labori
												ļ				trate cabin and Birwery rabin at Pello, laid on the 5' 0" gauge and
						1				ŀ				!		26 28 miles of mixed (5, 6" and 1" 32") pange line between Bhatinda and
		į	1					1							10	th North Western biate
		Robitkund and		Robikund and	10.10.01	3' 32'										raniway trains also work.
20	(a	Robitkund and Kumaon.	R. & K.	Robitkund and Kamaon Ry. Co	12-10-81	3.5,				117.87						Sub-clized by the Govern- ment of India.
		Shoraour Corlon .	F C.	Madro Ry. Co	2-6-02	3, 31,	l		Ì							
6	(f) (e,	South Behar	S. B.	East Indian Ry. Co.	1	5'6'				78.76			G4·75	•••		Balant : Par
21	(0)	South Indian .	5, 1,	South Indian Ry. Co	1	3' 32"		1,130.00					"			Rehate line.
23	(u	Southern Univertee	8. M.	Southern Mahratta Ry. Co.	513-41	3, 34,		1,042 64	•••					i !		
9	()	Southern Punjab .	8. P.	North Western	10-11-07	9, 6,,	-			425 33				· •••		Rebate line
9	(g)	Southern Pumps "Ludbiana" Ex- terser.	8 P. E	State By	10-6-46	5′6″	·			155 05	,					<b>3</b>
21	(d)	Tanjora District	г, в	South Indian Ry. Co	2-4-94	3′ 3₽′				103 36						
2	n	Inpti Valley .	P. V.	Bombay, Burnda and Central India Ry Co	1-12 #8	δ' 6"				155:48						Rebate lino.
33	(a)	farake-hwar-Magra Light.	13. F.	Bengal Provincial Light By, Co.	7-11-94	2' 6"					39 27					
4	(d)	Tarkessur .	т.	Bast Indian Ry Co.	1 1-85	5' 6"				22.23						Government land provided
33	(u)	Tezpore-Balipara Light.	т. в.	Tezpore-Balipara Light Ry. Co.	8-8-91	2' 0"				20.10						free. Subsubzed by District Board.
34	(a)	Thaton-Dayanzaik Light.	т. р.	Thaton-Duymzaik Light Ry, Co.	11-2-85	3.0,				7:78						Sub-idized by Local
21	(e)	Finnevelly-Qui'on	г. Q В.	1	1 0-02	ร/ กฐ"		56 48								(ioverument.
21	cr	(Travancore) (Buttish section), Timnevelly-Quilou,	T. Q. N.	South Indian-			1							İ		
19	(6)	(Travamente) . Na- tive State Section; Tirboot State	T. S.	Bengal and North-	1-8-03 1-11-75	3, 35,	::	614 30					67 99			
13	(4)	Tiropattur-Krish-	т. к.	Wrstern Rv. Co.	18-9-03			35.38								
		pagiri.		-			l									
23	(a)	L	v.c.	Udaiper-Chitor Ry.	1-8-95	3' 3]"						67:30				
		V													"	
3	(00)	Vijapur-Kalol-Kadi <b>W</b>	v.K.K.	Bombay, Baroda and Central India By, Co.	10-0-02	a' 3¶"		-					41.37			
23	G	West of India Portuguese.	W. I. P	Southern Mahratia R; Co.	17-1-97	3′34″									51-10	
		Total mileage of rai	lways op	on in ladia and Burn	s on the	5' 0" 3' 5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5,082 22 797 91 147 01 37 93	105.31		1,028·70 1,630·08 190 43 107·94	33.27	1,305 93	711:31 914:38 168:68 163:53	83.60	78.60	
	ì	31st December 196	36,			Total		15,614-0		2,855 14		1,838-80		235.28	73-60	3

### APPENDIX 2.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

Nu	øber.	Reilway administration	Nama of	Section of line		<u> </u>	Abbri	TONE, I	N MIL DU	es, made hing 19	TO OPE	N MILEA	GE
Main	Sub-	to which rail- way has been added.	owning railway.	added during 1906.	Date of opening for traffic.		Lor	gth.		Total	mileage	added to	2' 0"
hoad.						5′ 6″	3′ 3∤′	2′6″	5. 0.,	5' 6"	3, 31,,	2' 6"	2' 0"
1	(b)	Bengal-	Jubbulpore- Gondia Ex- tension.	Chhindwara to Khirsadoli		•	! !	16 28					
1	(e)	Nagpur.	Raipur-Dham- tari.	Rajim to Rajim Town	13th May 1906			0.78				17 06	
2	(e)	Bombay, Baroda and Central India.	Petlad-Cambay (Tarapur- Cambay sec- tion).	Can-bay to Cambuy Bandar.	1st March 1906	1.08				1.38			
	(b)		Eastern Bengal State.	Golokganj to Kokrajbar	1st February 1906.		35.75	•					
3	(c)	Eastern Bengal Brate.	Mymensingh- Jamelpur Jagannath- ganj.	New line hid at Jagan- nuthganj.	1st December 1996.		2.53				38:28		
			ſ	Bhongaon to Fernkhabad	1st January 1906.	27 06	·	1					
				Dhanbaid to Paharpur	6th December 1966.	163 71							
4	(a)	Fast Indian	East Indian	Ondal to Sainthia	10th December 1906.	42 94	· ···						
l		1.4		r'sharpur to Manpur Tetuhuzzi to Kusunda .	J5th August 1906.	17 42		!					
		110		The state of the s	6th December 1906.	1 59	•••	٠.		193.72			
	(6)	G ( F)	Agra-Dolhi Chord.	Kom to Sanket	21th February 1966.	5.95							
₹ 5	(f)	Greet Indian Pouincula	Indian Midlaud	Remaining portion of the Agra-Balinganj Branch.	27th Fobruary 1906	1.75	: !			7.70			
- 4		C	Ĺ	Azlakal to Hosdrug	21st August	34.52							
	( <i>b</i> )		Azhikal- Mangalore.	Hosdrug to Kararaged	1906. 1-t October 1904.	14 72							
6.		Madras <		Kasaragod to Kumbla	17th November 1906,	7 62							
	(g)	Į.	Morappor- Dharmapari.	Morappur to Dharmapuri	17th January 1906.			18 53		<b>56</b> 38		18.53	
	(11)	ſ	North Western	Snorket Read to Surgeda	14th May 1906	108-11						i	
	(b)		Amitea -	Amrit-ar to Tara Taran	21st September 1906.	11.50	,						
9		North West-	Patti. (	Tara Taran to Putti		13:29						j	
	(y)		Southern Pun- jab "Ludhus- na" Exten- sion.	MacLood Ganj Road to Ferovepore City.		78 00				208 63			
10	(a)	Oudh and Robilkhund State.	Ondh aud Rohilkhand State.	Phaphamau to Mariahu	leth June 1906	47 51				47:51			•••
	(a)	٢	Bengal and	Barhm to Tulsipur	15th January 1906.		22 54		- 1			i	
12		Bauer)	North Western	Chinsura to Jarwa	12th April 1906.		9 47					1	
		Bengal and North Western.	1	Puleza Ghat Shift No 68	18f January 1966	į	0 76				1		
			il il	Barari to Bhagalpur Kaohery.	15th March 1906.	-	3.20	.					
	(b)	ij	Tirhoot .	Bettialt to Narkatiaganj	17th January 1906		:3.73	į					
			{	Narkatanganj to Bhikua Thores.	17th February 1906.		21.20				81 50		
20	(a)	Robilkund and Kumaon.	Robilkund and Kumaon	Baroilly to Soron	29th January 19:6.		55 <b>8</b> 0				55.80		
21	(a)	South Indian	South Indian	Pamban beach to Rames- waram.	1st September 1906.		6-95						
	(d)	Court i militari d	Tanjoro Dis- triet Board.	Arantangi Quarry Branch	25th June 1906		8:90	.			10 85		
22	(f)	Southern Mah- ratta.	Hospet-Kot- tur.	Ramandrug to Ramana-	let Pecember 1906.		4 97				4 97		•••
25	(a)	Barei Light	Barsi Light {	Barsi Road to Pandharpur	2nd December 1906.			30.21				Ì	
				Kuslamb to Tadwale	1st May 1906	}		20.36	[			50-57	•••
	- 1		1	4	Total mileage a				ŀ				

### APPENDIX 2-concld.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

		administration Name of Se				A	orti <b>d</b> a	NB, IN	MILES DUR	, MADE ING 1906	TO OPEN	MILEAG	10
Nom	Sub- head.	Railway administration to which rail- way has been added.		Section of line added during 1906.	Date of opening for traffic.	-	Lou	gth.		Total r	niloage ad y adminis	ded to r tration.	ail•
ain ad.		anded.				5′ 6″	3' 3 %"	2′ 6″	2′ 0″	5' 6"	3' 3}"	2' 6"	2′ 0″
		MIL	FAGE ADDI	ED FROM THE 1st J.	ANUARY T	о ти	E 31	st M	ARCI	I 1907	•		
			Bengal-Nag-	Bhojndih to Gomoh	1st January 1907.	25.64							
			pur.	Branch line near Khanoodih	1st January 1907.	1 97							
1	(b)	Bengal-Nagpur	Jubbulpore- Gondia Ex- tension.	Khirsadoh to Barkuhi	21st March 1907.			5-72		27:61		5.72	
3	(a)	Eastern Ben gal State.	Fustern Bon- gal State.	Tiljala to Kakurgachi	let February 1907.	2.52				2 25			
5	(h)	Great Indian Peniusula.	Matheran	Neval to Matherau	22nd March 1907.				12.61				12.61
	(a)	(	Madras	Basin Bridge to Washer- menpet.	15th March 1907.	1.00							
6	(4)	Madras	Madras (North East line).	Basin Bridge to Korruk- kuppettar	15th March 1907.	0 85				1 85			
7	(a)	Nagda-Muttra	Nagd s-Muttra	Kotah to Baran	20th February 1907.	10-60				40.00		1.4	
10	(a)	Ondh and Rohilkhand State.	Ondh and Rohilkhand State.	Marishu to Zafarabad	1st January 1907.	10.67				10.67			
12	(4)	Rengal and North Wos-	Rongal and North Western	Gorakhpur to Chhitauni Ghat	76b February 1907.		60.91						
	(6)	(	Tirhoot	Bhaptiahi to Makhana Bazar,	1st March 1907		41 33				105-27		
						1							
									Ì				
				Total mileago added fr	om Ist January t	 	March :	l 1907	] 	82:38	105.2	5.72	12.6
				GRAND TOTAL MILES						-	08 12,254-6		-

### APPENDIX 3.

Total Railway mileage opened for traffic during, and at the end of, each year, and the total mileage opened during the Viceroyally of each Governor General.

				The state of the s
Calendab veab.	Not milongo addod during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.
1858 1854 1855	20 81 98	20 71 169	} 169	Marquis of Dalhousie.
1856 1857 1868 1859 1860 1861	108 18 140 198 218 749	272 287 427 625 838 1,587	1,418	Earl Canning
1862 1863	746 174	2,333 5,507	} 920	Earl of Elgin.
1864 1865 1860 1867 1868	481 408 200 366 79	2,958 3,363 3,563 3,929 4,008	1,501	Lord Lawrence.
1869 1870 1871	247 516 303	4.288 4,771 8,074	1,066	Earl of Mayo.
1872 1873 1874 1875	295 328 529 315	5.369 5,697 6,226 6,541	1,467	Lord Northbrook.
1876 1877 1878 1879 1880	319 460 899 275 668	6.860 7,320 8,219 8,494 9,116	2,621	Lord Lytton.
1881 1882 1883 1884	728 289 309 1,173	9,890 10,149 10,458 11,631	2,469	Marquis of Ripon.
1885 1886 1887 1888	652 609 1,211 473	12,288 12,892 14,103 14,576	2,945	Earl of Dufferin and Ava.
1889 1890 1891 1892 1893	1,811 814 907 507 689	18,887 16,401 17,308 17,818 18,804	3,928	• Marquis of Lansdowne.
1894 1895 1896 1897 1898	996 647 707 861 <del>9</del> 25	18,900 19,647 20,284 21,115 22,040	3,536	Earl of Elgin
1899 1900 1901 1902 1908 1904	1,483 1,229 , 611 868 1,028	28,628 24,762 26,368 26,931 26,956 27,665	6,255	Lord Curzon.
1905 1906	730 802	28,295	802	Earl of Minto.

### APPENDIX 4.

NUMB	RB.	Railway administration	Name of		Section of line.	Dute cou-	MIL AND TO	STILL		TIONED AINING CTED,	
fain ead.	Sub- head.	by which being constructed.	owning Railway.	Classification.	of which has been same-tioned.	struction was	5′ 6″	3, 31,,	2' 6"	2' 0"	Bemarks.
		a 1-100 y garages		<u> </u>	Bhojudik to Gomoh	1st November	25.61		ļ		Brmarks.  Since opened. Since opened. Work commenced. Not commenced. Work commenced. Work commenced. Work commenced. Work commenced. Work commenced. Work commenced. Work commenced. Work commenced.
					Branch line near Khanoodih.	1901	1.57			•••	
1	(u)	{	Bengal-Naypur	State line worked	Kamptee to Ramtek	18th August	14 74				Work commence
١	, ,			by company.	Kandri branch	1906. 13th August 1906.	2 53			. <b></b>	Work commence
}					Viziansgram to Rai	26th January 1906.	310.62			·	Work commence
				į	Sini to Garamaishin	19th Octobor 1906.	44.00		-	•••	work not aut.
1		Hongal·Nag• ≺		ſ	Khirsadoh to Bar-			)	5.72	•••	
	(b)	pur.	Jubbulpore- Goodia Exten- sion.	State line worked by company.		24th June 1904,			7.76		Work commenc
			•	Į į	Naippur to Mandla	23rd January			32-14		Work o mmeno
			Gendia-Chanda	State line warked	Gondia to Chanda	1901   26th August   1904,			1 18 6	i	Work commenc
	(/)		Extension	by compays.	P um (Brimapuri) to Saspur.	16th August 1904.			63:75		Work commene
	(g)		Porulia-Ranchi	State has worked by company.	Purulia to Ranch	20th October 1905			72-28		Work commone
		ì				Potal	99 50		330.30		
					Chanasma to Bech-	15th July 190		16 74			Work commend
	(i)		Chekwar's Moh-	Native State line     worked by com-		16th June 190		7.73			Work comment
2		Bombay, Baroda and		pany	Manual Road to Harrj.	15th July 1905		21 37			Work common
	(j)	Central Indu	Jaipur (Siwai- Madhepur).	Native State has worked by com-	1	2nd Decomber 1897.		10 65		, <b></b>	Work resumed
				pany.		Total		86.10			
					Kakurgachi chord .	1902	1	1			
	(n)		Eastern Bengal   State.	State line worked \\ by the State.	l f	ber 1100.	1			· ···	
					Durgapur Chur lua	1	3:80		"	•••	
8		Eastern Ben gal State.	ĺ		Forbesganj to the Nepal Frontice	27th Jun 1905.		7:40	,		Work commen
	(6)	1.	Fastern Bengal		Katahar to Goda	1904	1 "	105%			ł
			State.	by the State.	Kokrajbar to the Brobnapatra rive opposite Grubati	er, 1902	`  <u>"</u>	115%	"		Werk common
		1				Total	8:00	228.2	7		]
					Agra direct acces	1905	1	1			1
					Burharwa to Katwa		99:14	٠٠.			Work common
					Bhagalpur to Bans	ary 1905.	1	1		·	
					Borachuk to Sode	1905.	1 1	1	""		
				1	the Past India and Ondiana Po	i bei 1905	141	"	"	•••	N or commence
4	(11)	East Indian .	. East Indom .	State line worked	hilkband Stat	e				!	
				by company.	1	5th Marc 1906.	h 1·0	6		·	Work commer
					Chat hee to Saju	n- 5th Marc 1908,	1	0		ş	Work commen
					lfooghly to Katw	1965,	- 1	}	l		1
		1			h hurga to Hapur Topo-i to Bar:	13th Jan unry 1904, 18th Septem		.			
					beni. Mde 1704 from Howrah on the Jheris branch for Chandore.	her 1906 m 17th Marc m 1903.	1		-		1
						Total .	258-	72			

### APPENDIX 4-contd.

Nun	BER.	Railway administration	Name of	¥	Section of line,	Date con-	AN	D STIL	SANCTI L REMA NSTRU	INING	
Main hoad.	Sub- hoad.	by which being constructed.	owning Railway.	Classification.	of which has been sanc- tioned.	struction was	1	3′ 3½″	2' 6"	2' 0"	Bemarks.
and an artist of the second			•	ſ	Brought forward Kurla to Mazagaon	 17th Fobru- ary 1905.	606.61 6.87	314.76	<b>330</b> ·20		Work commenced
	(a)	ſ	Great Indian Peninsula.	State line worked by company.	Mahim link	7th Febru- ary 1905.	1.32				Work commenced.
5		Great Indian - Peninsula.		£ {	Warora to Balhar-	22nd January 1904.	37:59			,	'Work commenced,
	(g)	10	Gwalior Light	Native State line worked by com- pany.	Sabalgarh to Shin- pur	9th February 1901.				66:29	Work commenced.
	(h)	(	Matheran	Assisted Company's line receiving land only from Govern	l	20th June 1904.				12-61	Since opened.
				ment.		Total •	45.78			79-00	
	(a)		Madras	Company's line guaranteed under old contracts.		11th April	1.00	.*			Since opened.
	(1)		Azhikal Manga- lore.	State line worked by company.	Kumbla to Mauga	28th June 1903,	20.91				Work commenced.
6	(4)	Madra~ ≺	Madras (North- East line).	State line worked- by company.	Basin Bridge June- tion to Korakku- pettai.	11th April 1901.	0.85				Since opened.
	(+)		Nilgiri	State line work-	Cooncor to Octara- mund.	6th November 1903.		11:75			Work commenced.
	(1)	į	Salem-Attur .	ed by com-	Salem to Attur	16th September 1903.	36 06				Commencement of work not author- ised.
						Total	58:82	11.75			
					Crossing of the Chambal river to Muttra.	let August 1905,	199' <b>07</b>				Work commenced,
7	(a)	Nagda-Muttra	Neg-in-Muttra	State line worked by the State	Kotab to Baran	26th January 1906.	10.00		-		Suce opened.
					Nagda to the cross- ing of the Chambul river.	29th Novem- ber 1904	141 &3				Work communeed,
						. Total .	380'50				•
				[	mie 22°50,	11th July 1905					Werk commenced.
		0			Khushalgarh bridge and approaches		3:63				Work commenced.
	(a)	[	North Western State.	State line worked by the State.	Lodhran to Khano- wal Shahdara to Sangla	17th March 1906.					Work commenced.
	•				Shorket Road to	ber 1901.	130.65				Work commenced.
				1	Chichoki.	1906					
. 9	(k)	North West- ern State.	Jullundur-Ka- purthala-Sul- tanpur (Bri- tish section)	State line worked by the State."	Jullundur to the British Frontier	7th August 1903.			6.80		Commencement of work not yet authorised and question
	(1)	4	Jullundur-Ka- purthala-Sul- taupur (Nativo	Native State line worked by State Agency.	Sultaneur to the	7th August 1903.			22 02		of gauge not finally settled.
		* {	State section).			Total	268-91		26.82		
					Balanuu to Sitapur	ber 1906.	<b>37</b> ·12				Commencement of work not anthorised.
10	(n)	Oudh and Robil- khand State.	Ondh and Rohil- khand State.	State line worked by the State.	Mariahu to Zufara- bad.	2nd October 1903.					Since opened.
				,	Rosa to Sitapur	23rd Octo- ber 1900.	51 36				Commencement of work not authorised.
					Carried over	Total	99·15 1819·90	 826 51	* 359°12	79:00	

#### APPENDIX 4-contd.

Num	REB.	Railway administration	Nume of	01	Section of line.	Date con-	AND	STILL	NCTIO REMAII REUCT!	DMIN	
Main head.	Sub- head.	by which being constructed.	owning railway.	Classification	of which has been same- tiosod.	struction was ranctioned.	5′ 6″	3.8)"	2' 6"	2′ 0″	Bemarks.
			<b>D</b>		Brought forward Akhaura to Ashu- ganj	22nd May 1905.	1, <b>51</b> 9·80	326°51 19°00	359·12 	79:00	Work commonced.
11	(u)	Assam-Bengal (	Assam-Bongal	State Fire worked hy company.	Kalaura t - tho Khoo- scara river.	3rd March 1906. Total		16:00 35:00			Not commenced.
	(a)	{	Bengal and North-West-	Assisted company receiving land	Burhwal to Sitapur Daronda to Maha- ratganj.	26th October 1906, 28th Septem- ber 1904.		59· <b>79</b> 3·90			Not commenced. Work commenced.
12		Bengal and North-West- orn.	ern.	only from Gov- ornment.	Gorakhpur to Cibitaum Ghat. Savan to Thawe Bajiagma to Narka-	31st March 1903. 2nd November 1904. 23rd Septem-		17:83 58:05			Since opened.  Work commenced.  Work commenced.
	(6)		Tirhoot State.	State line worked {	tiaganj.  Bhagdpur Knehery to Bhagalpur.  Manor to Bhaptiahi	ber 1903. 17th January 1905. 23rd Septem-		0.79			Work commenced.
					Narkatiaganj to Bagaha. Saharsa to Murhganj	ber 1903, 23rd Septem- ber 1903,		26 24 18 61			od. Work commenced. Work commenced.
			Burma	State line worked	Noikban to Bogayet	Total .		306·52		 	Work suspended.
, ,	(a) (b)	Burns	Burma Erten-	by company.	Thamaing to Mala- gean.  Henzadi to Kyangin  Pegu to Martaban	18th October 1995. 19th April 1995 27th Novem-	``	6 70 65 66 121 27			Not commenced.  Work commenced.  Work commenced.
17	(a)	Dibrn-Sadıya	Dibru-Sadiya .	Assisted company, subsidized by Local Government,	Talap to Sarkhoa	her 1903. Total 11th May 1905.		259·88 8 52	-		Work commenced.
20	(a)	Robilkund and Kumaou.	Rohilkund and Kumaou.	Assisted Com- pany, subsidized by the Govern- ment of India.	Lalkua to Kashipur Moradahad to Ram- nagar.		1	36·43 47 69			Work commenced.
					Portion of the Ram- esh aram exten- sion.	ber 1904.		84·12 3·17			Work commenced.
21	(a)	South Irolan	South Indian	State line worked by company.	Tengachimadem to Port Ampthill Tirupachetta to Sivaganga.	16th September 1904, 21st April 1899.		9 00			Work commenced. Not commenced.
	(h)		Bezwada-Ma- sulipatam.	District Board's line	Bozwada to Masuli- patam.	20th Octobor 1905.		49*17	-		Work commenced
22	(l) (m)	Southern- { Mahratta.	Kurnool Road- Kurnool. Sangli	by company.  Native State line worked by com-	Kurnool.	1906.	"	32·00 5 77			Work commenced.
27	(a)	Cutch	Cutch	Native State line worked by Native	Anjar to Bhuj	Total 29th May 190	5	87·24 	27 38		Work commenced.
29	(u)	Dholpur-Bari	Dholpur-Bari	Native State line Worked by Native State.	Dholpur to Barı	14th November 1905.			19-25		Work commenced.
29	(a)	Dwara-Therris Light.	Light.	Assisted company receiving land only from Government.	Dwarn to Maolong Muolong to Therric Ghat.	1			13·50 6·00	ł	Work suspended. Commencement of work not authorised.
					Carried over	Total .	1,519-6	0 1,123 0	19:50	-	

### APPENDIX 4-concld.

Nom	BBR.	Railway administration	Name of		Section of line, the construction	Date cou-	AN	D SCILI	Bancti Rema Struct	INING	
Main head.	Sub- bead.	administration by which heing constructed.  Shaldara (Delhi)-Saha	owning railway.	Classification.	of which has been sauc-	struction was	5′ 6″	3' 3}"	2′ 6"	2' 0"	Bemarks.
			3		Brought forward		1,619-80	1,121-6	425-25	79.00	out I de la Transmissione magnis
31	(a)	Shahdara (Delbi)-Saha- ranpur Light.	Shahdara (Delhi)-Saha- ranpur Light.	Assisted company receiving land only from Government.	Baraut to Meerut  Delhi (Shahdara) to Saharenpur.	Th January 1902. 4th January 1902.			30.00	i l	Not commenced Work commenced
						Total .	 ·		125.00		
36	(a)	Howrah-Amta	Howrah-Amta	Assisted company,	Antpur to Champa- danga.	1902.				9 00	Commencement of work not authorised.
		Light.	Light.	subsidized by District Board.	Autpur to Rajbul- hat	20th March 1902.				8.50	Commencement of work not authorised.
						Total .		-		12:50	,
											•
			MILEAGE		M IST JANUARY 1907.	TO 31S F					
12	(a)	Bengal and North-West- ern.	Bengal and North-West- ern.	Assisted Company's line receiving land only from Govern- ment.	Benares to Jhoonsi	18th February 1906.		72-58			•
			Total mile	age sanctioned from 1	at January to Slat Ms	arch 1907		72:58			
							ų.				
		•				*					
							İ				

Capital authorized to be raised for the Madras (Gudranteed) railway, State lines leased to companies, to the 31st

•			A MOUNT AU	UP TO THE 3	BE RAISED B IST DECEMBE	у тие Сом- г 1906.	A MOUNT	FRAISED BY TO OF STATE IN E	HE COMPANIES
Num	ner.	RAIEWAYN.		•			Share (	Tapit <b>al.</b>	Debentures.
Main head.	Sub-head.		Share Capital.	Dobentures.	Debenture stock.	Total.	Eate of interest per cout.	Amount.	Cash received,
		Guarantoed.	æ.	£	.£	Ł		£	£
6	(a)	M:wras	10,257,630	2.221,000		12,481,630	\$ 47 43 43	8,757,670 999,960 500,000	2,219,054
		State lines leased to Companies	1						
1	(a) <b>{</b> (b) <b>k</b> (c) <b>{</b>	Bongal-Nagput  Do. Extensions	€ 000,000	1,900,000 3,605,000		<b>4,9</b> 0 <b>0,</b> 000 <b>3,6</b> 05,000	<b>4</b> 	3,000,000	1,892,961 3,595,983
5	<b>(</b> ,f)	Indian Midland	::,000,000	3,119,100		6,429,100	4	3,000,000	3,418,105
11	(a)	Assam-Bongal	1 500,600	1,355,900		2,855,900	3	1,500,000	1,352,525
15	(a)	Burnm	2 600,000		1,250,000	3,250,000	31	2,000,000	
20	(L)	Lucknow-Parcilly section (Robilkum) and Kumaon)		147,000		147,000			160,837
82	(11)	Southern Mahratta	3,500,000	1.865,000		\$,865,000	31/2	3,491,540	1,363,863
22	(1)	Mysore section (Southern Mahratta)			1,200,000	1,200,000			
		Total .	13,000,000	11,802,000	2,150,000	27,252,000		12.991,540	11,784,274
	, .	Branch lines  Ahmedabad-Dholka	\$6,667	)		8 <b>6,</b> 66 <b>7</b>		le le	1
2	(g) (h)	Ahmedabad-Parantij	133,333			133,933		•••	
10	(1)	Hardwar-John	200,000			200,000			
3	(0)	My mensingh-Jamalpur-Jagannathgam	166,667	1		166,667			
4	(6)	South Behar	100,000		290,000	620,000		379,580	
2	(1)	Inpti Valley	993,833		40,000	1.033,333			
9	(6)	Amritar - Putti	106,667			106,667	. 4		
	i	Total .	2,086,667		330,000	2,116 667		879,580	
•		GRAND TOTAL	25,744,297	14,026,000	2 <b>.7</b> 80,00 <b>0</b>	42,150,297		23,628,750	14,003,328

Details of Debenture loans on 31st December 1906 and the dates at which the loans expire.

Maaras Rameay-	1	Dengat-1	ragpur <b>ka</b> tew	ny -
200,000 34 per cont. 34,200 35 200,000 34 81,400 34 53,300 34 174,400 34 200,000 3 80,000 3 293,700 34 293,700 34 242,700 34	30th April 1907. 30th June 1907. 31st December 1907. 31st December 1907. 31st December 1907. 30th June 1909. 30th June 1910. 31st December 1910. 31st December 1910. 31st December 1911. 30th June 1912.	28 390,790 448,900 155,000 400,000 265,600 400,000 750,000 400,000 400,000 400,000 400,000	34 per cent 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n 34 n	10th January 1907, 18th February 1907, 7rd January 1908, 4th May 1308, 4th May 1308, 18th February 1909, 21st June 1909, 1st June 1909, 18th February 1910, 10th July 1908, 18th August 1910, 81st January 1911, 5th May 1911.

DIX '5.

and railways constructed under the "Branch line" terms, the amount raised and the amount withdrawn
December 1906.

AND ADVA	NCED BY THE	SECRE-	Амоч то тни	nt raised in 31st Deceme	INDIA SER 1906.		DRAWN TO	OUNT WITH- THE 31ST BER 1906.	
Debenture stock. Cash received.	Capital not boaring interest (premium).	Advances made to companies from money raised under Act 51, Vict, Cap. 5.	Sh <b>d</b> re Capital.	Debenture stock.	Capital not bearing interest (premium).	Total amount raised to the 31st December 1906.	During calendar year 1906.	Up to the close of calender your 1906.	RBMARKS
£	£	£	£	Æ	£	£	£	£	
	8,524				-···	12,485,208	172,323	12,651,532	,
								•	
	8,150	2,900,000				7,801,111	93,762	0.000 500	•
	9,450					3,605,433	672,972	8,060,760 9,710,953	
	-5,977	1,615,000				8,057,128	68,899	8,793,513	
	15,385					2,867,910		2,867,910	
1,199,819					[	3,199,819	279,755	3,947,017	
	735					160,102	13,987	481,459	
	81,007	2,120,900	8,460		34	7,024,804	21,791	6,978,189	
1,200,000	24,000		•••			1,224,000	6,016	*1,237,201	The Mysore Durbar has deposit ed £23,480 towards the shar of Joint Shares
2,399,819	81,280	6,674,900	8,160		34	33,949,307	1,161,682	42,080,051	of Joint Shares on the South orn Mahratta Railway book chargeable against the capita
		1							of the Mysore Railway.
			73,280			73,280	2,582	72,248	
	•••		130,000		2,667	132,667	419	133,202	
		···	195,067 161,096	•••	-	195,067	242	194,952	
290,000	15,000		161,096	***		161,096	1,917	161,016	•
	10,000		833,333	39,203		681,580 872.553	-147	735,189	
}			106,539		''	106,539	-52 79,398	872,190 79,398	
				*2*	-	110,000	12,000	12,080	
220,000	15,000		1,499,315	39,203	2,681	2,225,782	84,380	2,243,195	
2,689,819	104,904	6,674,900	1,507,775	89,203	2,718	48,651,297	1,418,393	50,979,759	

	idland Railway	-	Southern Mahratta Railway-	•
£ 610,000 421,200 500,000 257,500 150,000 742,500 165,000 582,900	37 per cent. 84 " " 88 " " 84 " " 84 " " 84 " " 84 " " 84 " " 84 " " 84 " "	30th June 1907. 31st December 1907. 3rd October 1908. 30th June 1910. 30th June 1910. 30th June 1911. 31st December 1911. 30th June 1912.	\$\frac{2}{100,000}\$ 3\frac{1}{2}\$ per cont.	
Lucknow-E	lareilly Bailway	-	Assam-Bengal Railway-	
82,000 115,000 147,000	8t per cent. 8t »	1st July 1910. 1st July 1911.	£ 560,000 3 per cont. 4th July 1907. 485,900 3t , , , , , , 13th April 1910.	

APPEN

### Capital expenditure in thousands of rupees

	L	Yrars.												
Number.	Railways (meluding branches worked).			•		Y	FARS.							
	A	1897.	1899.	1899.	1900.	1901.	1902.	1903.	1904	1905.	1906.			
											_			
(a) to (y)	Bengal Central Bongal-Nagpur	1,71,83	1,71,20	1,67,01	79,14	40,25	 1,42,51	1,17,81	1,02,23	68,63	26,7			
(a) & (r) to (f) & (n) &	Rombay, Baroda and Central	16,82	49,86	60,95	24,05	13,72	9.76	23,43	7.56	1,02	(			
(f) & (n) & (o), 3	Eastern Bengal State	3,00	13,89	29,15	31,10	40,07	35,32	30,88	38,18	37,15	30,0			
4	East Indian	80,80	1.07,94	G8,00	39 09	33.15	98,67	48,80	91,17	1,26,85	92,2			
5	Great Indian Poninsula .	65.88	80,87	67,71	18,77	2.19	4,12	26,13	62,16	16,17	25,1			
6 (a) to (h)	Madras	10,91	7,47	11,38	20,80	51,50	39,56	60,42	37,51	47,77	42,4			
_									,	01.00				
7	Nagda-Muttra		40.70	 FC 05	 07 04				1,75	21,89	1,00,3			
8	Nizum's Guaranteed State .	15,32	40 79	78,37 41 92	37,06	 51 63	49,91	30,87	1 91 50	1 99 70	1 45 0			
9·(a) to (j)	North Western State	1,26,86	62,24	39,27	41,48 27,17	2.30	20,61	54 52	30,78	1,92,78	1,45,8			
10	Ondh and Robilkhand State.	39,08 1,09,69	23,73 1,35,93	1,05,81	97,65	88,10	71,81	45,68	13,59	29,13	9,7			
11	Assam-Bengal	1.05,75	62,86	70,90	28,89	30,46	26,15	12,63	46,76	45 07	4,6			
13	Bengal and North-Western  Bengal Dooars	72 :	1,80	7,98	18,19	15,61	15,56	8,50	40,10		39,2			
13 14	Lhaynagar-Gondal-Junagud-	14,	1,00	1,0	10,10	10,01	10,00	.,,,,	.	***	•••			
14	Fori audar	9,30	5,43			•••								
15	Burnu	39,67	43 29	C2 52	50,63	56,42	35,77		3,39	42,25	58,			
16	Deoghur		•••			•••					•••			
17	Dibra-Sadiya										(			
18	Jodbpur-Bikauer	10,04	26 40	4,86	6,61	4,00	6,77		89	1				
19	Morvi	,	**-		2,32	11	3	85	<b>+</b> €,24	7,18	•••			
2 (b) & (g) to (m).	Rejputana-Malwa	12,09	8,58	2,67	64	21	1,07	1,63	35,80	26,36				
20	Rohitkund and Kummon .		•••			3	43	83	9,74	33,18	9,8			
21	South Indian	5.19	-21,05	2,70	14,00	₹6,50	73,39	56,12	27.81	7,14	•••			
22	Southern Mahratta		•••					2,56	12,60	2,78	9,8			
23	Udanpur-Chitor	26	1,13	2,16	45	21					•••			
24	Bara-et-Basirhat Light .					•••			5,69	1,38	•••			
25	Barsi Light		•••			•••	]		23	7,92	•••			
26	Bukhtiarpore-Behar Light .		•••					5.30			•••			
27	Cutch · · · ·		•••				•••	92	1,35		2,			
28	Dholpur-Bari		•••							2,04	1			
20	Dwarn-Therria Light		•••					8,24	1,39	82	•••			
80	Kalka-Simla			3,39	4,51	23,53	49,90	50,99	21,40	4,34	•••			
31	Shahdara (Dolhi)-Saharanpur Light			К					<b></b>		8,			
	Banaghat-Krishnagar Light .	1,01	5,01	5					1		•••			
82	Tarakeshwar-Magra Light .							16						
83	Tozpore-Balipara Light .										•••			
85	Darjeeling-Himalayan		•••								•••			
86	Howrah-Amta Light	4,01	29	5	1	8		20	2,79		•••			
37	Howrah-Sheakhala Light .	2,81	33					*		]	•••			
18	Jorhat								***					
	1			-1							-			

IX 7.
uring each of the past 10 years.

EXPENDITURE ON ROLLING-STOCK IN THOUSANDS OF RUPEES EXCLEDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.	ľ
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Remark						Yeard.				*
	1906.	1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.	1897.
• Purchase				15	4	3	27	1,95	4,37	11,59
the State	21,80	57,18	40,64	34,13	57,16	4,29	27,35	33,92	1,13	32
the 1st 1905 and is porated the	4,54	1,48	3,26	7,97	2,51	4,24	13,34	13,81	6,00	24
of the East Bengal	19,91	25,14	15,25	85,25	, 19,12	13,01	4,57	18,21	10,52	16,63
Ruilway [	54,33	90,13	28,98	17,91	54,29	73,57	64,34	1,06,52	36,32	27,27
	45,26	12,63	37,89	81,84	12,27	21,27	18,36	8,27	1,63	7,85
	4,29	7,49	6,21	16 44	25,43	10,11	3,26	3,66	1,47	6,57
	7,50	`								
	3,15	51	, 73	3,65	5,86	1,51	12,67	12,80	3,06	40
	1,14,41	89,50	13,91	14,84	22,21	12,30	* 70	5,70	21,85	36,32
	4,74	6,92	7,58	23,91	17,93	5,85	79	5,68	7,06	3,51
İ	10,41	4,79	6,32	9,86	7,69	3,05	87	1,63	2,65	4,25
	32,80	14,09	3,49	18,33	12,49	18,47	18,58	15,81	24,03	80,0
			5	25	7	1,40	2,32	4,00	1	52
	23		-1,05	55	35	80	16	8	1,24	67
	18,95	6,64	12,20	19,57	26,60	20,85	4,74	11,96	6,36	1,50
		19			.					
	23 78	71	1,36	4,22		1,18	2,52 22	16	20	14
4.P		3,00	1,00	23	1,95 —12	10	. 6	14,11	6,08	2
tRepresent penditure conversion	1,13 8,04	10,09	3,35	8,19	8,70	89	1,83	3,07	-1,59	-12
the existin from 2' 6 8' 3%" gan	11,65	77	1,83	6,11	6,86	2,06	3,30	1,02	2,42	2
8' 3%" gan		11,75	1,27	2,96	1,46	-3	26	73	43	1,22
	1,51	18,58	85	85	26	1,88	1,44	3,42	5,34	1,40
l						42			5	2,25
Ī	26		2,05							
İ	4,94	70				39			27	1,77
İ	15		23	2,17						
	10	10	12	12	•					
l	88				<b></b>					
		50								
	1,94	4,96	2,85	3,93	1,07					
† Purchase the State			:			•	24		1,20	
the 1st 1904 and i										
porated the Ea Bengal	19	8	1	1				18	1	
Railway.								12	6	
	13	12	70	41	9	1	-16	54	-25	2
	1,62		30	(	72		46	11	99	1,26
			·	3		•••		🐐	48	1,17
	6		2	12	4	-31	***		20	38
	3,75,56	2,60,17	1,92,38	2,62,54	2,84,05	1,98,73	1,77,67	2,67,68	1,48,71	1,37,44

APPEN

Capital expenditure in thousands of rupees

Light	3 38 	 1 1 49	 1 5 25 	  18 10 	 2  21  	  5  12  	 6  31 	8 4 14 4	5 16 16	2
hi)-Saharanpur huagar Light Jagra Light ura Light ualayan Light	 3 38 	 1 1 49	 1 5 25 	 18 10 	 2  21 	 5  12 	 6  31 	 8  4 14	 5  16 16 -1	2
hi)-Saharanpur huagar Light Jagra Light ura Light ualayan Light	  3 38	 1 1 1, 49	 1 5 25	 18 19	 2  21 	 5  12 	 6  31 	 8  4	 5  16 16	2
hi)-Saharanpur hnagar Light fagra Light ura Light ura Light		  1 1 49	 1 5 25	 13 10	 2  21	 5  12	 6  31	 8  4	 5  16	2
hi)-Saharanpur hnagar Light fagra Light ıra Light		  1	1 5		2	 5 	6	8	5	•••
hi)-Saharanpur hnagar Light fagra Light					2	5	6	8	5	•••
hi)-Saharanpur hnagar Light		 								•••
hi)-Saharanpur				i	i	- 1				•••
				- 1	- 1	. 1	1		- 1	•
		1			1	- 1	ı			
Light										•••
	·*									•••
			1						1	
Behar Light .								39	1	٥,
						7			_4	6,
at Light .									1	
r.,.					19	4	1		1	ο,
rat <b>ta</b>	5,60	6,29	7,50	5,79	4,59	3,20	2,98	2,26	5,49	3,
	76	1.52	3,59	3,03	3,83	1,46	3,40	6,64	8,41	25
Kumaon .	1,71	79	21	1,15	1,02	<b>C</b> 6	1,59	1,56	65	12,
lwa	2,85	3,32	3,98	3,53	8,20	13,68	9,48	8,62	13,99	16,
	49	7	5	- 18	1			-1	12 -13	
aer	7	6,35	-81	-1,58	3,16	3,77	62	56	27	
	2,41	7	1		7,20		" 32	22	23	-
		1	-1					21,11	17,60	22
. , . [	6,24	5,00	11,31	25,14	22,05	7,91	20,35	01 11	24	
ndal-Junagad	73	2,10	91	31	16	40	3	ا		
	1,08	53	38	16	2	5	21	5,55	3,54	2
orth-Western .	2,86	5.05	6,63	12,21	7,19	25,66	21,79	29,04	16,81	25
						·			12,03	9
ilkhand State .	4,01	4 38	9,74	8,30	9,45	12,75	12,40	19,80	19,62	11
n State	28,30	18,92	20,58	19,10	14,67	48,44	22,42	80,94	33,14	42
intord State .	3,15	1,24	-1,05	2,78	6,53	8,14	3,76	2,97	2,76	2
• • •							•			•••
, , ,	• 0,00	8 5,15	2,93	0,00	<b>3,3</b> 3	9,50	5,91	14,26	13,47	15
	3,30	● 3,16	2,43	3,93	9.33	17,01 4,56	23,56	64,79	73,48	53
Poninsula .	4,37	8,04	6,75	10,28	11,65		41,88	46,44	63,92	51
	19,82	28,96	8,72 40,78	13,85 48,92	11,37 64,24	15,46 58,69	23,86	49,13	1,08,73	30
al State	28,88 27,03	15,33 7,64	36,60	12.05	21,74	9,89	5,71	4,83	2,74	12
ods and Contral						•				•
a <b>r , .</b> .	8,56	57	25	1,68	<b>3</b> ,37	1,61	3,58	5,66	5,20	46
al	86	2,15	75	1,66	1,18	1,15	73	43		
	1897.	1998.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906
end).			د مناهد د الماليد	•		EADS.				,
uding brauches						,				
uding bran		ohes	ohea	ohea	ohes •	ohes y	ohes YEARS.	ohes Ymans.	ohes Ymans.	YEARS.

DIX 7—concluded.

during each of the past 10 years.

•				Y	TEARS.					Bemares.
897.	1893.	1809.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	
10,29	6,90	3,04	34	2,59	1,58	76	-36	***		
1,09,28	1,62,45	1,98,57	75,84	•77,61	1,76,45	1,91,68	1,19,88	1,19,67	1,16,49	
30,81	60,03	98,92	28,18	56,65	29,50	19,61	9,62	7,90	2,69	
51,23	35,51	56,40	49,25	66,77	81,52	1,19,34	1,00,61	• 2, 8,13	94,27	
1,42,53	1,66,97	2,18,13	1,62,19	1,41,12	1,45,82	1,39,68	1,45,03	2,83,23	2,21,78	
71,91	79,51	78,98	53, 2	44,51	23,58	1,16,21	1,76,71	1,02 30	1,12,28	
19,63	12,65	19,27	\$5,11	63,58	60,36	86,09	72,11	69,17	54,97	
							1,73	46,84	1,46,42	
18,30	60,332	96,90	32,24	18,10	15,84	5.73	5.26	6,53	1,83	
1,06.39	82,17	66,46	83,17	93,87	1,"0,10	69,53	2,09,09	2,73 27	3,22,00	
44,90	33,16	55,63	39,26	.32,76	76,17	87,15	53,66	41,37	34,11	
1,10,23	1,18,71	1,13,15	86,16	25,47	69,56	63,24	19,81	18,21	25,28	
1,63,10	79,46	70,13	5-,94	45,78	63,17	53,92	79,38	90,01	89,11	
2,17	4,25	22,26	19,77	15 2	10,15	7,09	5,35	3,56	2,13	
8,07	8,95	92	17	96	44	67	-1,40	-54	1,68	
59,37	51,62	86,24	92,79	95,26	71,01	81,03	36,97	81,20	90,42	
•••	1	-1	:		-9		•••	23	-23	
2,55	27	17	2,57	8,32	1,7.3	41	1,60	46	93	
10,12	F9,33	18,01	4 89	19,78	6,61	-57	2,21	1,60	2,11	
91	3	27	2,22	31	-26	56	6,18	9,85	99	
-2,83	9,13	10 59	17,19	12,71	25,.3	80,53	43,71	39,38	39,53	•
3,79	2,10	13	5,37	1,31	12,92	4,60	19,79	10,61	25,28	
4,59	-19,88	7,39	17.47	47.19	99,17	52,83	S1,08	23,65	50,32	
8,19	11,05	F,74	8,15 45	4,83 82	1.22	21,96	34,22	33,19	14,04	
2,51	1,18	2,16	1	1	-	1	 # 90	1 100	9	
1,77	27		•••	39			7,73 26	1,°3 14,69	41 11,32	
						7,18	62	19,00	19	
						1,04	1,48	10	2,93	
								2,04	1,56	
			ė			8,24	1,89	16		
		5,81	0,10	22,96	57,95	* 48,51	26,93	7,87	13,06	
								•••	14,10	•
1,01	6,21	5	21							
	2	24	-1	10	20	88	10	2	26	
8	7	17	18			•••				
41	24	79	-0	22	20	73	74	14	-9	
5,27	1,28	16	47	8	72	20	3,28	16	1,82	
8,98	81	1			•••	5	***	-1		
87	7	22	-28	-8	-5	8	•••	4	1	

APPEN
Capital outlay on the different classes of

					Mileage.	
DADIII r		•		Open.	Under con- struction.	Тоты.
PART I.						
CAPITAL EXPENDITURE ON BAILWAYS, THE TRANSACTION THE GOVERNMENT ACCOUNTS.		C PASS TH	ROUGH	Miles.	Miles.	Miles.
(6).—State lines worked by Companies	•••	•••		15,789.03	1,280.87	17,070 80
(ii)State lines worked by the State		•••		6,105:07	29540	6,100:47
(iii).—Companies' lines guaranteed under the old contracts		•••		10101	1.00	905.01
(iv).—Companies' lines guaranteed under modern contracts	•••	•••		32.01		<b>32</b> 0 <b>4</b>
(v).—District Boards' lines		•••		103-36		103 36
(vi) Branch Line Companies, receiving relates from traff	ne intercha	nged wit	h main	403 15		403.15
lines. Total open lines and lin	FS PARTLY	OPEN		23,337-56	1,577:27	24,914.83
(vii)Lines wholly under construction by State agency					601 37	601:37
viii).—Lines wholly under construction by Companies	•••	•••			269 40	248.40
TOTAL	L (vii) AND	(ciii)			869:77	869-77
(ix) Unclassified expenditure including collicries, &c.					***	, <b></b>
. PART II.	POTAL P	ART I		23,337:56	2.117 04	25,784 60
CAPITAL EXPENDITURE ON RAILWAYS, THE TEANSACTIO		en bo no	T PASS			
(i).—Branch Line Companies, receiving relates from traff lines.		nged wif	h mais	580 38	••	580.38
(ii).—Assisted Companies' lines—						
(a) Subsidized by the Government of India				162:36		169.90
(b) Subsidized by Local Governments	•••			136 26	8.53	162:36
(c) Subsidized by District Boards	•••	***		158 00	302	144·78 158·00
(d) Receiving land only from Government	•••	•••		1,193.76	82 67	1,276.43
		AL (1i)		1,650:38	91 19	1,741:57
(iii)Unassisted Companies' lines	•••	•••		41:77		41:77
(iv)Native State lines-						
(a) Worked by Native States	•••			1,338:30	27:38	1,365.68
(b) Worked by Companies	•••			1,840 12	152.88	1.993 00
(c) Worked by State railway agency	••			235 28		235 28
	Тота	L (iv)		3,415:70	150:21	3,593-96
(e).—Foreign State lines	•••	•••		73:60		73.60
Total open lines and lin	CES PARTLY	OPEN	·-	5,759.83	271:45	6,031:28
(vi)Lines wholly under construction by private Compa	mies			,,,	126.88	126.88
(rii) Lines wholly under construction by Native States		•••			19.25	19:25
Τυ	TAL (vi) AN	D (vii)			146-13	146-13
sii) State outlay on the Patri branch (Bombay, Baroda	and Central	India ra	ilway)			
	TOTAL PA	BT II		5,750:83	417.58	6,177.41
	GRAND T	OTAL		29,097:39	2,864-62	31,962.01
ABSTRACT.	and its	Dowt Tre	-	00.007-00	1.040.20	00.00
Outlay on open lines and lines partly open—(i to ai, Part I,			Part II)	29,097:39	1,848.72	30,946.11
Outlay on lines wholly under construction—(vii and viii, P.	uri i, and v	. miq 911,	rart 11)	•••	1,015-90	1,015-90
Unclassified expenditure (ix, Part I)	•••	•••		3.		***

DIX 8.
railways at the close of the year 1906.

	outlay at close of thousands of rupees.		Renarks,
Open lines.	Lines under construction.	Total.	NEWARKS.
<b>2,23,64,</b> 80	5,60,14	2,29,24,94	The outlay included in Part I under "State lines worked by Companies" of account of the railways purchased by the State from the East Indian, the Sout Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bongal, the Sind, Punjab and Debhi-and the Oudh and Robilkhand Gual antoed Railway Companies, represents the actual Capital expenditure incurred by the
93,07,49	2,29,59	95,37,08	Companies up to the date of purchase and subsequently by the State.
14,03,40	***	14,03,40	
29,24		29,24	
47,98		47,98	
8,17,46		3,17,46	
3,34,70.37	7,89,73	3.12,60,10	
	3,29,89	3,29,89	
	1,34,33	1,34,33	
	4,61,22	4,44,22	
		96,63	
3,34,70,37	12,53,95	3,48,20,05	
3.10,64	1	3,10,64	
1,57,26		1,57,26	
1,25,00	62	1,25,62	
74,01		74,61	
8,49,29	23,76	8,73,05	
12,05,56	24,38	12,29.94	
27,60		27,56	
4,72,26	2,77	4,75,03	
12,92,34	31,84	13.24,18	
1,31,41		1,34,41	
18,99,01	31,61	19,33,62	1
1,50,79	****	1,50.79	
35,93,56	58,99	36,52,55	
•••	28,64	28,64	
	3,60	3,60	
	32,24	32,24	
97.09.50		8,08	
35,93,56	91,23	36,92,87 3,85,13,82	
3,70,63,93	8,48,72	•3,79,20,73	Includes Rs. 8,08,000, item (viii) of Part II.
•••	4,96,46	4,96,46	D**
•••		96,03	L <sub>1</sub>

APPEN

# Capital liability on account of Railways classed

		CAPITAL	OF PURCE.	ASED RAIL	Ways bein	G PAID	(2)	(3)	(4)	(5)	(6)
		Dedication Desired Commuted Capital representing Annuities which were purchassed by creation of debt thability included in column 3).	New Stock of Great Indian Peninsula Railway		by Annuity	Net out- standing.	State outlay.	Debt in- curred for purchase of Rail- ways.	Capital advanced by Gov- ernment to Com- panies,	Capital ruled hy Com anies on Secretary of State's uarant o (including over drafts).	Total Cap tal limbilit
INDIA, GENERAL	£	æ.	æ	£	£	æ	£	 £	£	£	
1. Fast Indian	32,750,000	7,299,157		25,450,843		22,931,474	8:64 634			8,000,000	£
2. Raiputana-Walwa (incldg					2,010,000		10,768,146				47,131,18
3. Rowari-Phulera		•	.,				335,978	i i		•••	10,768,
4. Palanpur-Deosa						i	15,944			•••	835,37
5. Bhopal			•	113					•••		15,94
6. State railway stores		•	•				217,180			•••	217,18
7. Expenditure in England for		···		•••		٠٠.	10,633				10,68
stores purchased and remaining unapprograted.	•••						111.332				111,33
CENTRAL PROVINCES.											
8. Warors Colliery			•-				85,624	.,	•••		85,62
9. Umaria ,, (depreciation on works).			-				12,178				12,17
0. Bilaspur-Etawah							5,009				5,00
1. Nagpur-Chhottisgarh (dogre- ciation account).							43 802				40,80
Вовма.						1).					
2. Burma Railway Extensions		**		•…	•••		829,335	•			829,33
Ansam.									į		*
3. Jorhat						,	60,613				60,61
BENGAL.											
4. Eastern Bengul system	3,(91,917	543,817		2,548,100	249,811	2,598,289	9,819,374	1,371,901			13,822,50
5. Murshidabad Branch			•••		•••		FGG.987		•••		560,98
6. Dhubri Ganbeti						•••	521, 460				521,36
7. Tirhoot							3,757,929				3,757,92
8. Tirhoot new Extensions .					,	•••	781,127				731,42
9. Ranaghat-Bhagwangola .						•••	20,163				20,16
0. Katihar-Godagari							378 319				378,31
United Provinces.	1	ŀ		ĺ				1	2	- 1	
I, Oudh and Bobilkhand						•••	4,000,851	10,728,742			14,828,59
2. Agra-Delhi Chord							£52,687				852,68
3. Allahabad-Jauppur		•					205,138			*	205,18
. Forbesgauj-Nepaul							3,267				8,26
PUNJAB.			Ì								0,00
North Western	14,009,124	4,911,216		9,097,908	742,786	8,355,122	81,076,535	4,138,601			43,570,25
. Shadara-Sangla							158,720		1	l l	158,72
. Joch Doal (southern sec.) .				l		•••	462,364	***	***		462,36
. Quettu-Nushki				.*		•••	580,239				
Frontier Bailway Reserve			i		•••					***	580,23
Petroleum Operations, Balu-	l					•••	293,212	""		i	293,21
ohistan.						•••	7,946		•••	•••	7,94
Juliandar-Hosbiarpur				• ••			969	}	•••		96
2. Ludhiana-Ferozepore		***				•••	1,887				1,88
3. Kalka-Simla	- 1				•••	•••	1,087,096	53			1,087,09
Loi Shilman							117,829				117,82

DIX 9.

as State railways at end of 1906.

		Suare	CAPITAL (	1) A Public Por A Zu Pro	SED RAIL	WAYS BEIL	NG PALD	(2) 😼	(3)	(4)	(5)	(6)
	Railways.	Commuted value of stock purobased.	Ded Commuted eaptal representing annuitos which wore purchased by creation of delet (liability incl., ded in column 3).	Now stock of Great Indian Pennesala Radway Company issued in exchange for por- tion of	Net capital to be paid off by annuities.	Deduct amount redeemed by at mily payments,	Not out- standing:	States outlay.	Dolting ourred for purchase of Russians, ways.	by Government	Capital raised by Companies on Secretary of State's guaranten (including eyer-drafts).	Total capital lighthty
	Broo ht forward	±, 50,151,011	£ 12,754,150	£	.£ 3 <b>7</b> ,396,851	£ 3,511,966	£ ::3,681,885	.£ 75,884 415	e 20.877,319	£	8.000,000	£ 111,508,61
85. £	Mannas. South Indian (including Pamban Branch). *							2,112,536	1,726,169		1,118,000	8,086,69
36.	Finnevelly-Quilon (British							2,787	•		287,2.9	269.99
7. 1	Feet.on). Transvelly-Quilon (Native)							11,-15		•	774,731	786,60
88	Nate sections Azlakal-Mangaloro		•••				●	801.311				891,51
39.	North-Post line, Madres railway (E)-t Coast Railway, south to section).	<b></b> .						4,081,072				4,381,07
10.	Nilgin							249,529				219,50
1. 1	Bezwa beest molon							78,705				78,7:
2,	Bezwode Va alapitano									67.278		67,2
3.	Guntakal-Mysore frontier .	:						554,099				304,0
1.	Tunj re District Board							190,191		77,733	41,047	317,2
5.	Vizagap Jam Raipur							16,556				16,3
б.	Hospet-Korbuz							98 997				90,9
7.	Beilary-Rayadrug			•••				51,898				51,8
8. '	Tiropattur-Krishnagiri .							71.917				71,9
o.: :	Morappur-Dharmapuri .							55,789			•••	55,7
	Coonsor-Colamanaund			10,		i		\$1,000	•••			≻4,0
1.	Rame-waram Extension .							28,370				38,8
	Bombay. Great Indian Sesingula .	31,859,218		1,750,000	33,103.218	2,500,216	30,807,002	1,159,555	5 261,006			
53.	Bombay, Baroda and Central							1,057,010	12,499,144		2,600,000	15,556,1
1.	India. Jodhpor-Uzderabad (British							271,076				271,:
55.	- section) Kurnool-Road-Karnool							1,357				1.5
6.	South rn Mahintta (depreci-				•		<b></b>	85,108	) '			35,1
57.	ation on works). Sabarmati-Dholka							9,9.3				8,9
58.	Baran-Kotah							122,007				122,0
59.	Nagda-Muttra			1				1,174,563				1,174,
		85,010,259	12,754,190	1.750 000	70, 506,069	5,814,18:	61,691,887	F8,301,971	47,087,298	2,045,011	15,128,047	217.535.5
30.	Leased Lines. Assum-Bengal							5,339,428			2,855,90	8,195,3
ι.	Bengal-Nagpur							2,961,162	1	9,068,961	1	{
2.	Burma							5,127,489	! ;		8.937,225	1
3.	Indian Midland									2,143,148	1	
4.	Lucknow-Bareilly							341,40		324,857		1
3.	Mysore										1,200,000	-
	Southern Muhratta							1,105,225	1	2,120 900	1	
			·					13.975,513		13,666,066	·	,
	Brancu Line. Hardwar-Debra		•••		·	·			·		194,955	<del></del>
	TOTAL .	85,010,250	·					102,250,401		16.911,377		

APPEN

## Main results of working Indian railways

	١	ln	THOURANT	OS OF RUPE	F.B.	- 17		Percent-	P.	ASSENGERS.			Goons,	
Year.	Milengo open.	Capital cutley.	Gross carnings.	Working expenses,		Gross carnings per mila per week.	Percent- age of working expenses to gross carnings.	age of net carnings on Capital outlay on lines wholly and partly open.	Number carried in thou- sands.	Karnings	Average rate charged	carried in thousands	Earnings in	Average rate charged per ton per mile in pies.
4554	•				e	Re.								
1853 .	20	37,96	90	41	49	87	45 56	1.50					•••	•••
1854 .	71	4,00,00	2,31	1,42	63	63	61 47	0.52				<b>,</b>		•••
1855 .	169	5,50,00	9,13	4,55	3.58	93	55'97	0 65	•	•••			•••	•••
1856 .	272	8,00,00	16,10	6,71	9,36	114	41.57	1.17						
1857 .	287	12,00,00	25,43	10,51	14,80	170	41.45	1.21				٠		•••
1858 .	427	16,00,00	. 33,82	15,63	18,19	152	46*22	1.14						
1859 .	625	22,50,00	57,24	\$7,74	20,50	176	48 16	1:31						
1860 .	833	26,66,60	ce,67	37,05	29,59	153	55.61	1:11		<b></b>				
1801 .	1,587	24,00,00	93,63	(8,60	40,54	120	t3 90	1.19						
1862 .	2,333	48,90,00	1,31,15	50,32	51,13	111	59:74	1:13						
1863 .	2,507	53,00,00	2,20,47	1,03,04	87,13	169	60 mil	1.62						
1864 .	2,958	59,00,00	2,55,89	1,70,95	1,15,01	156	59.76	1.98						
1865 .	3,363	<b>6</b> 3,00,00	4,25,81	2,24,27	2,01,57	244	52:13	3.20						
1866 .	8,563	70,00,00	4,91,91	2,59,34	2,32,53	266	52.73	3:02						
1867 .	3,929	80,00,00	5,14,51	2,93,76	2,50,7s	2.36	<b>5</b> 3·95	3-13						
1868 .	4,008	84,00,00	5,67,00	3,07,16	2,59,63	272	54-22	3:00						
1869 .	4,255	89,60,00	6,13,10	3,41,74	2,71,36	277	55.74	3.05			]			
1870 .	4,771	04,00,00	6,56,67	3,63,15	3,03,52	269	54:47	3:37						"
1871 .	5,074	90,60,70	6,59,20	3,67,97	2,91,23	250	55 82	3-21					)	
1872 .	5,369	90,00,90	6,82,96	8,73,45	3,09,51	245	54:68	3.44						"
						3								•
1673 .	5,697	91,72,60	7,22,90	3,77,85	8,45,05	244	53.28	3.75						
1874 .	6,226	95,87,15	8,33,77	4,0€,89	4,29,88	258	48:14	4.48	•					
1875 .	6,541		7,91,37	3,97,48	3,93,89	233	50'23	3.90						-
1876 .		1,01,77,85	9,38,83	4,46,45	4,87,38	262	47.81	4.65	"	-				
1877 .	7,320	1,09,01,24	12,11,28	5,38,68	6,72,60	\$18	41:17	6.17						
1878 .	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49-97	4.76						
1879 .	8,475	1,22,83,97	12,08,15	6,26,28	5,81,87	275	51.84	4.76						
1880 .	8,096	1,28,56,91	12,86,55	6,48,00	6,38,55	282	50.37	4.97						<b>*</b> -
1881 .	9,858	1,40,80,80	14,32,31	7,07,12	7,25,19	285	49:37	5.16	54,764	8,79,23	2-78	13,214	9,55,97	795
1883 .	10,069	1,43,24,42	15,35,23	7,66,81	7,68,43	294	49-95	5:36	58,876	4,08,37	2.71	14,838	10,15,97	7:91

DIX 10.

as one system from the commencement.

		In	THOLSANI	e Of Kurb	es.			Percent-	P	ASSENGERS.			Goods.	
Ymar.	Mileage open.	Capital outlay.	Gross carnings.	Working expenses.	Net carnings,	Gross earn- ings per mile per week.	Percentage of working expenses to gross carnings.	net earnings on capital outlay on lines wholly	Number carried in thousands	Earnings in thousands of rupees.	Average rate charged per mile in pies.	carried	Earnings in thousands of rupees.	Averag rato charged per tor per mil in pics
						Ra.			,					
883 .	10,447	1,48,30,56	16,28,94	7,97,05	8,11,89	301	48.62	5:68	65,099	4,00,08	2.60	16,999	11,28,89	7:3
884 .	11,527	1,55,15,01	16,06,62	8,15,62	7,91,90	276	50.76	5:09	73,815	4,46,84	2.56	16,663	10,56,59	7:3
885 .	12,208	1,61,91,78	17,98,96	8,86,33	9,12,63	284	49-27	5 C1	€0,865	4,78,12	2.52	18,925	11,91,54	6.8
. 886	12,865	1,70,49,89	18,70,46	8,93,10	9,77,36	285	47.75	5.7.3	88,436	5,00,77	2.51	19,576	12,38,59	7.0
887 .	14,068	1,82,87,93	18,46,81	9,10,33	9,36,48	260	49/31	5:12	95,413	5,35,32	2.21	20,196	11,92,93	7·1
									•					
889 .	14,525	1,93,04,33	19,76,45	9,87,11	9,89,01	233	49 96	<b>5</b> ·12	193,156	5,69,06	2 71	22,::93	12,79,04	6.8
889 .	15,900	2,05,04,61	20,19,37	10,37,71	16,11,63	257	50:64	4-93	110,650	6,12,74	2 50	22,249	15,05,56	6.8
690 .	16,401	2,10,67,04	20,67,01	10,00,89	10,36,12	213	49.87	4.85	111,682	6,25,81	2.21	22,613	12,99,52	7·1
891 .	17,283	2,21,06,42	21,01,03	11,30,39	12,73,64	271	47 02	5:76	122,855	6,86,13	2:32	26,159	15,60,81	6,2
892 .	17,769	2,27,30,00	23,22,03	10,90,35	12,82,58	253	46:91	542	127,388	6,91,15	2:53	26,825	14,77,52	6.2
893 .	18,450	2,33,17,87	24,08,42	11,04,77	12,73,65	254	47:13	5'46	135,520	7,29,57	2.50	28,817	15,21,03	6.6
894 .	16,840	2,37,79,61	25,50,89	11,98,40	13,52,49	262	46'98	5:69	145,727	7,57,58	2.56	32,614	16,24,82	6.4
895 .	19,467	2,11,08,05	26,23,69	12,11,49	14,11,70	261	46°1:#	5.73	153,081	8,02,21	2.49	23,628	16,36,94	6:0
896 .	20,209	2,68,95,23	25,36,14	12,17,81	13,22,30	245	47.86	4:92	159,500	8,22,07	2.45	32,471	15,41,51	6.4
897 .	21,115	2,82,12,01	25,60,11	12,47,73	17,12,38	230	1874	4.62	150,581	7,62,13	2:47	33,926	15,89,80	8.3
898 .	22,024	2,92,09,29	27,41,31	12,08,68	14,42,63	244	47:37	4.94	151,566	7,58,68	2.50	35,642	17,84,97	60
899 .	23,507	2,08,50,12	29,36,78	13,93,36	15,43,42	246	47:45	5.00	161,720	8,09,39	2:51	39,748	19,19,82	5.9
900 .	Revised. 24,752	3,29,53,34	31,54,02	15,09,31	16,45,01	215	47.85	4.99	176,308	8,95,07	2:51	42,896	20,36,52	5.8
901 -	25,363	3,00,16,89	33,60,38	15,72,45	17,87,93	235	46:79	5-27	194,749	10,07,17	2.48	43,392	21,23,57	5.7
902 .	25,931	3,49,77,34	33,92,69	16,70,49	17,22,20	252	49-24	4.93	196,618	10,27,48	2.21	45,597	21,23,41	5.0
903 .		3,41,11,23	36,00,82	17,11,09	18,89,73	257	47.52	5'54	210,231	10,98,14	2.51	47,684	22,41,92	5.6
904 .		3,52,85,95	39,64,97	18,77,50	20,87,47	277	47:36	5.91	227,097	11,76,20	2•31	£2,051	25,18,61	5.3
<b>10</b> 5 .		3,66,93,94	41,68,09	19,94,00		283	47 84	5.92	248,157	12,73,83	2.47	51,936	26,20,71	5.1
906 .	29,097	3,79,20,73	44,11,73	22,00,71	22,10,99	292	49.88	5.83	271,063	13,68,31	2.46	58,869	27,59,69	5.4

APPEN
Summary of the general

Indian Railways trea

										į			<b>G</b> E	VERAL RESUL
										1			TOTAL WORKIN	O EXPENSES.
			Calor	ndar	şcar.			•			Total Capital outlay in thousands of rupors	Gross erreings in them ands of rupees.	Amount in thousands of rupees.	Proportion per cont to gross carnings.
	 			1	•	 •	_	-	···		2	3	1	5
1003											0 49,77,34	.33,02.60	16,70,49	49 24
903										٠,	344,1123	36,00,82	17.13.09	47:52
904											3,52 8,700	8001,97	18,77,50	47:06
05						• .			ر.		3,68,95.94	11,6: ,00	19,91 00	47 81
906									,	. 1	3 79 20,73	11 11,73	22,08 74	49.88

						•					GR	OSS EARNI:	NGS IN TH	OUSANDS
							Cox	CHISO TRAI	Fic.					Соопя
Calendar year.				1-t clus :.	2nd class.	Int rece- dete class	brd class.	Senson and vendors' tackets.	Office Conclude Traffic	Total Concling Tradic (sum of 15 to 29).	Total Geod Tradic (sum of 20 to 27).	General merchan- div.	Coal and coke for the pull be and foreign radways	
	14				15	16	17	18	19	::0	21	22	23 	24
1902					08,57	56,59	67,00	8,54,97	2,75	1,17,60	11,75,09	21,23,11	17,10,72	2,26,75
1903					41,50	58,10	71,68	9,16,31	10 13	1,56,26	12,54,40	22,31,92	18,53,45	2,29,93
1901					40,76	19,73	71,51	9,80,63	11,19	1,61,36	13,37,56	25,18.81	20,85,50	2,56,13
1905			•		45,19	6116	83,96	10 673	12,23	1,6160	11,34,72	26,10,74	21,33,22	2,89,19
1906		•			47,23	67,95	£6 87	11,53,18	13,38	1,68,34	15 06,65	27.59 69	22.36 58	3,21,81
				į					:					1

Number of passangers and quantity of goods carried, the average miles

. •	GRD CLASS.	:	litis.	MEDIATE C	lnare		to Clars	21	₹.	FF CTASS	1:	1						
Average rate charged per mile in pies.	Averago miles carried,	No.	Average rate charged per mile in pies.	Average indes carried.	* · No.	Average rate charged per mile in pice.	Average miles carried.	No.	Average rate charged par nulo in pics,	Average unles	No.			ar.	erye	dend	Ci	
48	47	46	<b>4</b> 5	44	43	42	11	40	30	38	37				6	9		
-2:3:	41 03	171,716	3.11	61 30	6,813	5-21	82:39	2,530	12.86	102:28	563							1902
2.38	40.04	184,292	3.00	61.61	7,214	5.24	28-13	2,580	12:31	101.21	594	7					•	903
2.3	40.71	199,651	3 00	62:89	7,394	5.69	74.23	2,715	13.41	อร.กิธ	GUS		,		•	•		901
2.3	40 92	215,413	3.09	63.78	8,104	5.77	72.92	2,919	13:31	98:29	661		٠	•	٠	•	•	905
2.2	40.36	289,391	3.06	64.12	8,491	5.74	71.47	3,026	13-16	100 71	684							1906

DIX 11.

results of working
ted as one system.

)F WOR	RKING.										•
Ner	FARNING	8.		Pra	HIPE OFE	٧.	1	Pak	TR VIN-MI	Lī.	
Amount thousand	holon C	entage quial loy.	Gros estali		Vorking	Net earnings	Gro		Merling Xp ns.s	Net car dies.	Rumards
6		7	8	.	9	10	11	: 1	12	 18	and the second second second second
			T	z.,	Rs.	Rs.	18		Ba	125	
17,22	,20	92	13,	984	(,142	0,61.	3	67 i	1 81	1 80	
19,82	,73 5	:4	12,	258	6 48	7,010	3	7:	1.73	197	The Journa in the capital ontlay for 1903 is due to the
20,87	;17 :	91	14.	,2 t	6,811	7,53	:   :	· G	1.53	ges :	revision of the carried out av hitherto adopted for ine purchased by the State from Committeed Rail-
21.74	1,00	92	11	731	7,017	7,09	3	8)	1 86	20:	way companies
22,10	90 5	33	1%	162	7,5-3	7,599	3	85 -	1.92	1.03	
)r RuP	EES.				1101	KING ES	RUP	SIN ELS,	THOUSA	7188 D.	•
Mi i- c!	Resenno dores, mondr y coa ad materia accusiono		Elect to telegraph	Stoon- lost and and- ries	Ru gue i ing.	m lave	Car-	• ព្រះប៉ែក	General	Cross vices examined by the art of the art o	`.
25	26	27	:	19	20	31	::::	84	**	35	
21,67	1,11,93	25.68	7,72	56,85	0,80,17	1,78,85   1	,70,38	2,72,70	1,03,70	۶-,19	
23,07	1,10,90	27,-1	7,81	26,06	00,83,1	6,11,15	,52,51   5	2,02,19	1,08,91	1:0,14	
19,14	1, 0,04	ro,27	6,00	1 00,00	1,37,28	0.72,07	70,74	1,10 2°	1,15,67	1,00,49	The totals of column 193 to 97 are more than the figures shown in column 32 by the amount of th
20,68	1,46,51	34,77	£ 79	1 09,67	1 81,19	7078	,84,05	1.31,02	1,80 93	1,0<,00	Camparo Barhwal link carnings.
20,58	1 51 54	37 20	1,63	1.06.76	5,10,21	7 72,80	2,03 66 1	3 71 1 7	1 28 01	1,1146	ll '

carried and the average rate charged, and the train-mileage run by railways in India.

THE AV	ERAG	E RAT	re chai	к <b>с</b> ър.	11.14	LIIM MIAS RUOUT		18	God	1:8 '1 EA1	F1 fc
SRASON DORS	AND		TOPAL PARSEN CARR	GERS				nalenge vigovlja- navank-	Tous		Average
No.	Aver- age miles car- ried,	Average rate charged per mile in pics.	No.	Aver- age miles car- ried,	Coach- ing.	Goods.	Mixed.	Total train (includes nous train ago)	thou	miles curied	charged per mole in pies
.19	50	51	12	53	54	15	56	57	58	59	âu
15,026	8:85	1.41	198,618	40.03	21,708	CC,010	31,781	92,527	15,607	157:54	558
15,551	8.75	1 48	210,271	30.00	25,889	26,308	31,478	95,900	17,084	159-93	5.64
14,729	9.08	1.41	227,097	39.06	31,577	08,797	28,620	102,721	52,051	172-12	5 39
18,029	9.16	1.12	248,157	59-90	33,191	:9,712	29,892	107,0 15	54,936	176:60	5:19
19,468	9:57	1 38	271,063	29.43	37,175	41,693	31,014	114,551	58,869	165 97	5 12
			ì					l			:

## APPENDIX 12.

#### General results of working each railway system.

Nı	лавки.									
Main head.	Sub-head.	Bailway system (wab Appendix 38).	Year,	Number of pessions of vertical (in their ands)	Quantity of goods and my mark enrich tin tours and figures and fig	Gross carn- logs on thousands of rupers),	Working expensed (in thousands of rupe(s)	Not earnings (in thousands of cupacs)	Percentage of working expenses to gross carnings.	Ermarky.
		5' 6' GAUGE.								
***		Beigal Central	1: 02 15/3 1: 04 1: 05 19: 6	1,911 1,989 2,041 \$1,070 \$	159 206 235 476	13,17 15,09° 15,60 16,66 §	7,43 10,01 10 20 \$5,08 §	5,74 5,08 5,40 11,58	56 43 66 36 65 40 \$76 28 \$	‡ Figures shows are only for the first but of the year Those for the se- cond-bulf have been
1	(a), (!) and (e)	Pengal-Nagpur	1: 62 1903 1-04 1905 1906	6,172 6,1, 9 1,7,15 8,102 9,5, 1	2,890 1,918 2,381 3,975 4,645	1, 12,18 1,55,18 1,8412 2,4+71 2,09,47	72,80 85,03 93,15 1,10, 8 1,27,9)	69,38 70,46 95,87 1,34,03 1,41,51	51·20 51·09 49 31 45·23 47·49	included with East ern Bengal Stat- railway, broad gauge § Included with the Eastern Benga
2	(a), (c) to (f), (n) and (v)	Bumbay, Paroda and Central India.	19 0 1: 0 1 19 0 3 1 20 5 1 20 6	05,501 10,651 21,681 23, 80 21,539	1 927 1,770 1,797 2,055 2,314	1,71 20 1,83,76 1,91,08 2,11,73 2,19,23	83,50 91,73 99,19 92,47 1,03,54	87,37 92,03 1,00,95 1,15,25 1,15,69	48-9-5 49-92 47-20 44-67 47-23	State railway bread gauge.
8	(e)	Enstern Bengal State	1909 1900 1904 1905 1906	13,654 14,54 14,85 17,090 21,188	1,800 2,651 2,600 2:75 3,694	1 03,53 1,0 ,22 1,0 8,77 1,18,00 1,11,12	50,03 51,39 57,50 64,14 83,13	53,80 55,83 50,97 53,56 51,90	48 18 50 27 53:14 54:61 58:10	
4	(a) to (d)	East Indian	19/2 1903 1904 1905 1906	23,276 24,282 25,581 25,988 28,143	10,484 10,702 10,241 12,236 12,517	7,04,31 7,26,62 7,87,06 7,79,46 8,26,07	2,58,80 2,46,28 2,66,82 2,82,15 3,21,75	4,15,54 4,80,39 5,20,14 4,97,31 6,01,32	36 71 33-89 33 89 36 20 38:55	
5	(0)	Grent Indian P. ninsula {	1902 1203 1103 1 05 1906	18,349 20,224 27,454 25,233 27,334	7,278 4,518 7,042 5,676 6,959	4,24,25 4,(8,(9) 5,8(,20) 6,30(4) 6,41(0)	2,12,87 2,30,10 2,02,53 3,05,37 3,22,01	2,11,38 2,38,20 2,93,57 3,25,07 7,22,01	50·17 49·18 49·96 48·44 50·0	
5	(b) to (g)	Indian Midland {	1962 1903 1904 1905 1906	2,5 m	1.549	1,09,63 (0,33	55,07 49,68	53.96 50,65 *	50 78 49 52	* Included with th Great Indian Pen insula railway.
6	(a) to (d,	Markton	1902 1903 1904 1905 1004	13, 05 17,712 13,953 14,396 15,573	2,819 2,349 2,748 2,748 2,522 2,891	1,66,64 1,73,47 1,96,53 2,08,41 2,13,90	91,(0) 1,(1,50) 1,(1,2) 1,(2,39) 1,27,03	74.95 71.97 70,14 86,02 86,81	54°86 58 51 58 41 58 73 59 12	
8	(a) & (b)	Nizam's Gauranteed State	1902 1903 1904 1905 1903	1,759 1,797 1,476 1,583 1,107	935 895 878 857 857	46,96 46,26 46,53 46,26 48,33	18,73 19,93 16,83 15,72 18,43	28,23 26,93 29,70 30,54 29,90	89:59 41:79 56:17 33:98 83:13	
9	(a) to (j)	North Western State—  Commercial Section {	1903 1903 1904 1905 1906	† † † †	† † † †	4,17,94 4,89,77 6,12,74 5,99,17 6,35,58	2,23,99 2,20,61 2,63,32 2,81,14 3,09,24	1,93,95 2,69,16 8,49,42 3,18,03 3,26,34	53·59 45·04 42·97 46·94 46·65	† Information no available.
		Militury Section }	1902 1903 1904 19-5 1906	† † † †	† † † †	37,09 38,99 46,00 43,07 50,19	41,97 41,71 52,19 43,97 50,83	-4,98 -2,72 -6,19 -90 -54	113·16 106·98 113·47 102·09 101·07	
		Total	1902 1903 1904 1905 1906	20,522 22,777 25,524 20,617 33,698	5,904 6,064 6,131 7,237 8,051	4,55,03 5,24,76 6,54,74 6,42,24 6,65,67	2.65,96 2,42,72 3.15,51 3,25,11 3,60,07	1,89 07 2,66,44 3,43,23 3,17,13 3,25,80	58·44 49·61 47·89 50·62 52·50	
10	(a) to (c)	Oudb and Robilkhand State	1902 1903 1904 1905 1906	8,332 8,902 9,776 10,797 11,869	2,302 2,250 2,541 2,910 2,256	1,34,18 1,42,18 1,55,60 1,56,99 1,68,01	68 81 68,49 82,95 92,21 88,53	65,87 73,64 72,66 64,78 79,48	51·28 48·19 53·31 58·74 52·69	
11	(°)	3' 3}" gaves. Assam-Pougai {	1902 1903 1904 1905 1906	1,763 1,961 2,120 2,476 2,732	326 403 361 432 604	20,96 24 28 30,10 84,83 42,20	18,42 19,58 28,57 83,00 87,92	2,54 4,70 1,59 1,93 4,28	57 58 50:64 94:92 94:75 89:86	ű.

#### APPENDIX 12-contd.

## General results of working each railway system-contd.

Nu	MBES.		<del>*</del>		,					
Main head.	Sub-head.	Railway 113stom (tide Appeudix 39).	Year.	Number of passengers carried (in thousands).	Quantity of goods and unnerals earned ( n thousands of toos).	Gross erraings (in thousands of rupees).	Working expenses (in thousands it rupees).	Not earnings tin thousands of rupees).	Percentago of working expenses to gross parn-	Remarks.
12	(a) & (b)	8' 33" GAUGE—confd.  Bengal and North-Western	1902 1903 1904 1905 1906	10,126 12,977 12,910 14,905 15,169	1,460 1,707 1,780 1,815 2,689	1,01, <b>5</b> 0 1,19,15 1,29,99 1,23,61 1,43,83	47,0 t 49,50 51,60 53,31 64,93	54.46 70.65 76,3 \ 70,30 70, 0	46:37 40:71 89:70 43:13 44:45	
13	(a) & (b)	Bengal Donara {	1002 1003 1904 1905 1906	362 443 519 456 453	91 121 171 194 201	5,27 6,58 7,61 8,82 9,93	2,69 3,28 3,66 4,35 4, <b>9</b> 5	2,59 3,20 3,45 4,47 5,88	51:01 49:87 62:05 4:132 40:79	
14	(a) to (d)	Bhavnagac-Gondal-Junagad- Porbandar.	1902 1: 03 1904 1965 1966	1,506 1,600 1,938 2,105 2,200	245 264 302 284 316	16,85 	10,02 9,82 10,56 10,00 10,98	6.53 9.72 11,81 11.41 12,69	59-49 50:27 47:20 49-03 49:58	
15	(a)	Burma	1902 1903 1904 1905 1906	12,105 14,220 16,118 16,874 17,610	1,603 1,860 2,175 2,130 2,589	1,25,03 1,36,14 1,51,02 1,57,76 1,57,32	72,30 83,95 85,82 95,95 98,70	52,73 52,19 65,70 61,81 58,62	57:83 61:66 56:19 60:82 62:74	
16	(a)	Deaghui {	1902 1908 1904 1905 1906	185 263 281 273 329	10 15 14 14 15	30 41 47 45 51	24 90 32 32 33	6 11 15 13 21	79 75 73:17 68 43 71 11 61:11	
17	(a) & (b)	Dibru-Sadiya {	1902 196 <b>3</b> 196 <b>4</b> 1905 1906	702 27) 539 313 296	510 558 613 642 667	9,19 9,76 10.(4 10,14 10,73	4.5/8 5,2/6 5,70 5,55 6,10	4,12 4,50 4,74 4,53 4,53	54:77 53:89 56:75 64:73 69:65	
3	(b) to (d)	Eastern Bengal State {	1902 1903 1904 1905 1906	*	2,049	80,81 85,5 ) 89,55 89,38 1,09,60	33,03 44,28 50 17 44,64 53,23	40,88 41,22 39,38 44,70 50.37	49 41 51 78 56 02 4 29 51/04	"Included "'with Eastern Bengal State Railway (5'6" gauge).
8	(e)	Byderabad-Godavari Valley	1902 1903 1904 1905 1906	1,216 1,183 1,264 1,591 1,803	537 546 34) 373 342	22,88 1,2,14 22,12 29,64 30,43	13,25 13,25 14,37 16,35 16,11	9,64 8,86 7,75 13,79 14,22	57 69 59 98 64 97 7 5 16 53 12	
18	(a) to (v)	Jodbpur-Bikaner {	1902 1903 1904 1905 1906	1,878 1,580 1,702 1,970 2,107	456 403 439 471 587	25,02 27,44 20,60 35,24 40,76	13,76 13,24 13,51 14,91 18,66	11 96 14,20 17,09 20,33 22,16	52:18 43:16 44:15 42:31 45:78	
19	(a)	Morvi {	1902 1903 1904 1905 1906	243 257 208 286 205	19 19 84 40 34	3,05 2,98 3,55 8,23 8,08	1,92 1,53 1,61 1,49 1,48	1,13 1,45 1,89 1,74 1,60	62-85 51 43 46:73 46 13 48 ( 5	
6	(e)&(f)	Nilgiri and Shoranur-Cochin	1903 1903 1904 1905 1906	339 695 724 782 742	40 156 119 105 105	4,14 6,28 6,83 7,02 7,12	2,59 3,56 4,28 4,92 5,19	1,65 2,72 2,60 2,10 1,93	58-23 56-58 61-87 70-09 72-89	

#### APPENDIX 12-contd.

#### General results of working each railway system—contd.

	MBBR.	Railway system	Year.	Number of presengers curred (in	Quantity of keedeal d minerals enried in	Grass carns togs (in thousands	Working expenses on thousands	Net earnings (in thousands	Fi centaga of working expenses	Rewlbes,
Main head.	Sob-beal,	(ride Appendix 34).		curried (in thing-ands).	thousands of tons)	of rupus).	of rupecs).	of rupees).	to gross carnings.	
2	(b) & (g)	3'34" GAUGE—concld. Rajputana-Malwa	1902 1903 1904 19 5 1906	17,091 12,447 11,194 15,2/3 16,851	9,2°0 1,976 1,117 2,669 2,691	2,65,04 2,73,74 2,41,47 2,93,78 2,59,52	1,95,79 1,1-,11 3,14,80 1,25,5 1,56,96	1,79,85 1,17,63 1,26,57 1,67,48 1,62,5;	47 46 49 67 47 56 42 91 47 31	
20	(n)	Rbilkund and Kumaon •	1902 1.00 1004 1905 1506	7,509 1,546 1,6 3 1,772 2,867	432 419 439 441 441 402	19,64 18,16 19,15 19,78 24,5)	8,76 8,47 8,93 10,13 12,57	9,58 9,69 16,32 9,75 12,02	47 00 46 65 46 67 5 796 51 12	
21	") to (/)	South Indian	1502 1503 1503 1503 1505 1506	17,887 17,878 19,164 19,383 20,3-1	1,010 3,526 3,03 3,105 3,233	1, 5,55 1,01,49 1,41,03	10,97 51,81 60,72 69,77 81,00	59,13 77,04 73,74 71,26 63,63	45 10 49 47	
23	(a) to (7)	Southern Mahrat'a	19 2 19 3 1 0 4 19 3 1 0 5 19 6	0,197 0,68 7,178 8,494 6,991	J,016 1,089 1,131 1,342 1,115	93,17 95, 8 3,0 ,95 1,14 26 1,20,82		32,52 30,12 39,45 4 (90 48,70	61 51 6**+16 + 0 70	
23	(4)	Udaipur-Chitor	1932 1:03 1:04 1:04 1:06	170 11 0 162 257 276	27 15 11 16 27	2,17 1,78 3,51 2,08 2,15		97 67 53 1 04 1,36	61:86 60:00	
24	(1)	2' 6" GAUGE, Barnsot-Basirhat Light	{ 1902   1903   1904   1905   1906	   295 312						
25	(11)	Barsi Light	1902 1503 1904 1905 1906	72 62 77 101 177	50 45 5) 82 57	1,30 1,67 2,19	77 1,62 80	1,39	59 28 61 09 3 ; 53	
26	(a)	Bukhtiarpore-Behar Light,	1902 1993 1904 1905 1906	118 298 252 274	25 19	3,14 89	48 58	6 36	41·90 59·55	
27	(a)	Cutch	1902 1903 1904 1905 1903							
20	(a)	Kalka-Simla	1902 1903 1904 1905 1906	6 84 97 96	25 27	5,90 7,52	3.82 3.51	2,08	64-41 46-68	

#### APPENDIX 12-conold.

## General results of working Each railway system—concld.

N	DESTI.		<u> </u>		1			Ī	I	
Main head.	Sub-bead.	Railway system, (vide Appendix 38.)	Year.	Number of passengers carried (in thousands).	Quantity of goods and miverals carried (in thousands of tons).	Gross earn- ings (in thousands of rupeus).	Working expenses (in thousands of rupecs).	Net earnings (in thousands of rupces).	Percentage of working expenses to gross carning.	Bumares.
<b>≠ 1</b>	(0)	2' 6" GAUGE—concid.  Mourbhanj	1902 1908 1904 1905 1906	   30 64	   13 12	   31 45	   24 23	  7 22	  77-42 51-11	
1	(d)	Parlakimedi Light {	1902 1903 1904 1905 1906	 52 * 59 68 82	 4 7 10 7	 17 21 27 21	 27 22 23 81	 10 1 10	 155-58 106-29 85-19 147-62	•
20	(e)	Powayau Light {	1902 1908 1904 1905 1906	258 269 272 299 322	24 22 25 80 32	76 76 92 1,00	53 43 47 56 60	23 29 31 86 40	70·24 60·84 60·34 60·87 60·60	
*		Ranaghat-Krishnagar Light	1902 1903 1904 1905 1906	241 248 + †	1 7 †	76 86 ‡11 †	55 63 129 †	21 83 ‡12 †	71 97 60-86 70-24 †	†Included with the Eastern Bengal State Bailway motre and special gauges.
32	(a)	Tatakeshwar-Magra Light	1902 1903 1904 1905 1906	428 427 472 456 508	11 17 23 22 26	84 85 90 87 1,00	59 60 62 65 67	25 25 28 22 33	70-82 70-40 69-20 74-71 67-00	‡Figures shown only for the first-half of the year. Those for the second-half have been included with the Eastern Bengal State Rail-
33	(a)	Tezpore-Balipara Light	1902 1903 1904 1905 1906	125 145 149 156 156	8 9 8 14 16	85 95 88 1,03 1,15	63 67 71 76 60	22 28 17 27 36	74:53 70:72 60:43 73:79 69:67	way matre and spe- cial gauges,
6	(g) & (h)	Morapur-Dharmappuri and Tirupattur-Krishnagiri	1902 1908 1904 1905 1906	  37 245	   2 14	   13 79	   14 81	  -1 -2	 107:69 102:53	•
35	(4)	2' 0" GAUGE.  Darjeeling-Hinnlayan	1902 1903 1904 1905 1906	80 109 139 137 134	93 44 44 44 44	8,50 9,62 10,45 9,72 9,81	4,72 5,45 5,73 5,61 5,78	3,78 4,17 4,72 4,11 4,03	55-5 1 56-65 53-46 57-72 58-92	
86	(a)	Howrah-Amta Light	1902 1903 1904 1905 1906	783 808 855 940 993	14 17 13 17 29	2,65 2,77 3,97 9,29 3,51	1,32 1,39 1,42 1,51 1,74	1,83 1,38 1,55 1,78 1,77	49-86 59-82 47-82 45-90 49- <b>5</b> 7	
37	(a)	Howrah-Sheakhala Light	1902 1903 1904 1905 1906	814 343 346 351 864	6 7 6 6 7	82 87 86 86 91	50 52 47 50 54	32 35 89 38 37	61:33 59:85 54:72 56:82 59:84	
38	(a)	Jorhat	1902 1903 1904 1905 1906	130 156 163 167 162	12 12 10 10	87 91 74 70 98	90 77 78 76 80	-3 14 -4 3 13	104:22 85:02 105:17 96:20 86: <b>0</b> 2	

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

N	UMPER.			ļ		11			<b>.</b>		-		
		Railway system, olds Appendiz :	38.	forms, ments, l	includ- rapery, ashery, ry, uui- secoutre- pots and ocs.	Coal an carried public foreign	for the	1. F	iaw.	(a Twist at Euro		Twist an	(5) id yarn li <b>k</b> n.
	Sub-head.			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Barnings.
		5' 6" gauge.		Tons	Rs.	Трик,	Rn.	Tons.	Rs.	Tous.	Rs.	Tons.	Rs.
	(a), (b) & (e)	Bongal-Nugpur		. 378	8,566	2,012,391	52,85,536	19,360	2,38,006	4,610	89,770	15,733	1,86,4
4	(a), (c) to (f)	Bombay, Baroda and Central India .		649	14,455	77,403	3,22,675	172,186	17,60,407	622	9,028	15,918	2,41,8
	& (n) & (o)	Eastern Bongal State	1	. 833	9,101	562,548	1,47,352	3,261	12,456	1,921	14,049	3,567	29,5
		East Indians		4,098	1,00,790	6,484,721	2,16,25,499	70,052	9,42,972	1,862	49,050	16,762	2,08,6
		Great Indian Peninsula		1,322	51,968	219,622	0,69,398	363,527	87,23,423	1	2,20,869	18,088	2,00,0
	(a) to (d)	Mudras		645	15,370	361,826	8,31,560	38,365	3,58,690	4,905	43,560	16,365	1,40,5
	(a) & (b)	Nisam's Guaranteed State		90	1,785	399,209	11,75,206	8,742	53,468	3,190	34,927	2,732	38,2
		North Western State		1,260	97,916	163,800	4,20,448	83,917	9,34,068	1,623	32,866	8,098	1,39,1
		Ondh and Robilkhand State		688	8,027	65,411	2,69,378	28,056	1,52,317	2,171	19,351	6,786	47,0
		3' 3''' gauge.								1		·	
į		Assam-Bongal		129	1,711	22,806	63,498	2,570	19,627	677	8,022	376	3,4
		Bengal and North-Western		903	11,939	119,659	2,51,783	1,393	16,565	408	5,343	6,085	ÇQ,
		Bengul-Donars		5.2	91	13,951	58,414	ı	3	18	68	40	<b>₩</b> .
		Bhaynagar-Gondal-Junagad-Porbandar		370	2,941	11,004	11,285	32,366	1,51,761	48	329	1,114	5,
		Burrea		687	10,315	1,155	1,588	5,426	27,217	3,468	66,670	449	6,0
		Deoghur		]									
		Dibru-Sadiya		]		562,290	4,82,589	191	2,332				
	(e)	Hyderabad-kodavari Valley		63	1,775	8,937	40,046	33,552	4,00,158	398	7,297	1,039	21,
		Jodhpur-Bikaner		267	3,106	22,403	65,603	17,805	78,501	13	87	622	3,
	(e) to (h)	Madras		59	559	848	H18	525	3,930	403	1,122	1,239	4.
		Morvi		. 31	17.5	157	159	2,362	14,513	1	в	57	·
	(b) & (g) to	Bajputana-Malwa		1,031	25,250	38,279	1,16,184	99,990	10,57,800	695	9,485	12,715	2,97
	(m) (a) & (b)	Robilkund and Kumson		386	3,551	1,292	1,497	1,011	8,282	139	622	2,333	10,
	1	South Indian		367	2,253	10,021	25,790	37,431	1,86,271	2,755	81,043	10,359	78,
		Southern Mahratta		305	4,355	9,055	47,030	105,065	5,11,474	2,386	32,131	13,339	1,26,
		Udaipur-Chitor		. 16	120	<b>99</b>	96	1,872	7,346		40	30	
		2' 6" gauge.		1			1	1					1
		Baranot-Basirhat Light	• •	·l	39	36		 9,412	24,380	88	329	178	"
		Barei Light		. 8	1		72						
		Bukhtiarpore-Behar Light				 43		131	340	62	211		_
		Cutch	• •	314	8,333		41,771	1	84	2	58		[ "
	(0)	Kaika-Simla		] ",	2	4,686 204	345	1	1	1		19	
	(d)	Parlakimedi Light			1	l		٠'	*	*		189	
	(0)	Pownyan Light	• •	]				l					١
		Tarakeshwar-Magra Light				142	126						] ;
		Tezpore-Balipara Light				2,946	7,684	13	139	1 0			
	"	2' O" gauge.	•	1		-,	.,						
		Darjeeling-Himolayan		203	5,939	1,657	15,302		100		113	193	3,
		Howrah-Amta Light											
		Howrah-Sheakhala Light 4			l								۱
	<u> </u>	Jorhat								l			
				-								150 (0)	
		To	TAL 1906	17,822	3,99,672	11,187,407	3,22,92,986	1,120,121	1,57,09,681			153,485	
;		To.	DTA E 1905	. 17,908	4,00,612	10,202,501	2,80,96,879	1,232,702	1,85,70,936	40,167	6,83,428	151,398	18,80
		T <sub>N</sub>	CBRAS B			-	32,90,110				·	2,037	26
		D	ELVERO	. 60	9,970			106,881	94,61,386	1,373	4,089		<b>.</b>

DIX 17.
earnings therefrom during the calendar year 1908.

and is therefore not the same as the total production].

	1	II.							1	v				v.		•			
-	OOTTO	N.								u			DRU	īgs.					Noneur.
,	Mawupa	CTURBD.					•		Chem	ioals,			2.	Non-int	OXICATIN	ie.			
-	Piece- Europ	goods,	Picco- Ind	goods,	Oth	e) iera.	To	TAL.	exce	oting etre.	1. Intos other oph	than		icinal ations.	Othe	b) ern.	Tv	WAL.	Main bead,
	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings	Quantity.	Barnings.	Quantity.	Earnings.	,
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Bs.	Tons.	Ba.	Tons.	Ra.	Tons.	Rs.	Tons.	Rø,	Pons.	Rq.	
۱		1,04,331		1,06,206			50,231	6,74,908	348	5,294	56	1,002			1,394	17,004	1,460	18,006	1
	14,485	3,01,859	22,705	3,60,908	1,091	22,908	227,007	28,97,015	750	14,498	40	1,057	39	797	2,846	42,203	2,925	44,107	2 .
1	23,484	2,63,193	2,563	22,597			34,796	8,30,799	1,160	12, 01	88	1,308	19	708	1,360	17,764	1,507	19,836	8
Ł		15,41,285	9,910	1,07,163	3,307	57,029	163,153	29,67,080	0,854	1,04,676	132	1,914	781	31,709	2,383	40,049	3,296	78,670	4
١		1,01,790	17,012	3,28,891	1,560	37,088 1,26 9	447,831 77,792	1,04,65,469	08 158	38,501	225 1	8,156 20	275 346	10,781 9,5 <b>0</b> 1	2,216 2,876	49,897	2,716 3,223	66,914	6
	7,482	45,946	10,581	1,16,069	94 60	1,26 9	19,005	7,61,614 1.89,882	188	3,554	83	492	117	2,326	954	31,516 7,617	1,103	41,070	8
		4,09,450	37,774	8,00,800	1,548	33,618	152,031	24,39,016	5,408	74,367	308	7,126	761	20,172	8,164	1,20,312	9,323	1,47,680	
	7,360	53,316	5,896	40,485	361	3,216	50,600	3,22,249	181	1,661	113	2,707	126	1,336	954	9,000	1,003	12,712	10
	2,315	22,018	549	4,478	11	119	6,408	53,269	325	2,362	0	123	83	1,242	511	3,681	603	<b>5,046</b>	11
l	17471	1,76,400	6,088	55,295	378	4,708	31,829	3,27,436	1,040	4,484	88	1,478	138	1,376	20,259	95,350	20,485	98,213	12
	632	3,473	71	583	· <b>-</b>		762	4,309	441	3,882	1	2	•••	2	466	6,861	467	5,965	18
l	894	6,422	1,558	10,074	7	71	35,887	1,74,681	83	890	25	319	73	643	92	523	190	1,383	14
l	6,398	1,00,003	521	10,006	6	148	16,268	2,16,761	128	3,057			92	1,226	273	3,636	365	6,062	15
l		•••					 101	 2,382			400	4,105	•			•••	400	4,105	16 17
ļ	955	16,621	1,200	19,273	 17	278	37,200	4,64,908	20	213	5	118	15	304	53	637	73	1,059	8
١	1,215	10,257	3,028	19,644	47	408	22,730	1,10,788	67	734	g	130	30	163	277	2,540	316	3,188	19
l	300	1,268	470	2,185			2,937	19,381	21	245			29	310	359	1,513	387	1,820	6
l	10	206	154	630	8	14	2,617	15,583	9	45	163	20 3	9	35	10	20	182	350	19
	14,297	3,41,107	18,514	3,93,743	1,139	25,47 1	138,340	21,54,674	312	6,609	142	2,830	33	B463	1,896	34,819	2,071	38,565	2
	768	3,529	2,221	13.031	63	541	6,535	32,681	77	643	27	332	21	331	1,440	A,491	1,488	9,344	30
	8,242	1,11,402	4,562	38,851	325	2,317	59,677	4,49,109	118	2,527	101	934	905	7,413	1,088	10,493	2,097	18,812	21
	4,583 220	67,881 1,552	5,694 362	75,172 2,924	509 5	0,983 45	131,206 3,491	8,19,896 12,078	733	8,142 1	30 3	639 42		2,952	430 48	5,119 336	664 51	8,700 378	22 23
																			34 .
1	279	1,157	260	871	17	54	10,234	27,201	23	71			2	11	50	147	52	158	25
																	***		26
	68	310					261	77ù		"		<b>,,,</b>							27
1	176	3,666	75	1,495	25	805	269	5,990	7	179	2	52	46	1,064	111	950	159	2,066	80
	76	107	7	* 17			103	176	1	1 2			"		12	14	4	14	1
l	14	11 367	14	16	•••		217 219	200 887	2 :	13					12	8	19	8	20
I	219 64	141					64	141			-	•••						***	23
						<i></i>	19	139					8	62				63	23
l	368	10,148	86	2,974	26	698	621	17,871					70	1,209	42	1,285	112	2,534	85
ļ	•••				١													***	36
١	***																		37
-	<b>*</b>			<u> </u>	<u></u>					 									38
1	240,219	47,85,907	160,824	26, 17, 946	10,599	1,98,352	1,795,493	2,67,52,848	19,886	2,91,714	3,110	33,369	4,236	97,778	50,400	5,10,980	56,812	6,42,095	
l	-	49,34,385	143,806	23,46,666	8,867	1,86,979	1,829,882	9,84,08,487	15,611	2,59,020	3,221	37,503	3,705	92,721	51 ,484	5,28,448	57,350	6,58,679	· :
-	*		16,469	271,183	1,948	12,473		,	4,577	33,094	<u> </u>		631	5,052				***	
ļ	5,874	98,478	٠.٠١	-			92,890	28,68,689		-	211	4,133		-	. 958	17,496	598	16,577	<i>y</i>

\*

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

TW P B B	B.			·	· **		٠.		• Dyn	V)								
		Railway system, vide Appendix 38.	(i) Alizarir antiine	ne and	(2) Cute		(8) Indi	1	(4 Myrab	·	(0 Tanning		(6		(7 Oth		Tot	FA I, .
Sub-head.			Quantity.	Катої с.	Cuantity.	Earn!ogs.	Çvantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Its.	Tons.	Re.	Tons.	Rs	Tons.	Ra,	Tous,	Re.	Tons.	Rs.	Tons.	Rs.	Tons.	-
		5' 6" gauge.													10201	AV6.	TOHN.	Rs
(a).		Bengal-Nagpur	<b></b>				•••		33,174	2,08,251			6,697	L <b>5,9</b> 85	2,953	20,494	43,824	0710
(a), to (		Bombay, Baroda and Central Indus.	1,100	24,153	200	1,358,1	37	680	96	1,150	453	2,471	1,983	38,240	2,352	38,123	6,620	8,74,6 1,06,5
8 (4		Eastern Bengal State .			179	1,501	85	1,157					5,010	31,009	281	1,997	5,555	96 71
•	]	East Indian	190	3,73 I	1,429	16,903	1,887	30,351	5,241	42,174	4,128	10,145	6,990	1,40,186	4,371	52,763	24,239	36,7
5	.	Great Indian Peninsu's	1,846	48,338	1,165	27,350	368	7,284	27,845	1,96,106	14,531	63,580	9,106	1,30,057	3,503	47,419	58,351	5,20,1
(a)		Madras	535	6,133	176	1,199	928	12,6+3	2,810	16,701	24,953	1,61,616	10,528	73,050	1,097	11,649	41,025	2,82,9
(d)	å l	Nizam's Guaranteed State.	310	3,808	55	127	3	66	306	1,608	2,805	14,957	701	7,890	136	1,603	4,415	30,8
(8)		North Western State .	692	20,880	73	623	1,495	41,165	443	4,213	1,445	5,169	4,662	60,657	8,037	84,584	16,885	2,17,2
'  "	-	Ondh and Robilkhand State. 3' 31" gauge.	61	721	174)	2,094	80	714	191	1,545	426	1,370	1,653	17,166	265	2,690	3,137	27,0
ı] ·	- 1	Assam-Bengal			27	126			2	20	١,							
	.	Bengal and North- Westera. Bengal-Doors	33	419	1,146	11,602	1,201	10,860	165	1,495	886	2,567	72 3,972	37,067	737	7,672	8,140	71,6
	- 1	Rhaenawar Goudal-	111	750	9	56	4	34	94	457	" 1		29	1,103	45	222	74	3
	- 1	Junagad-Porbandar. Burma			2,915	28,637		7	8	128	278	2,671	881	6,773	389 79	1,687	/93	4,0
6	- 1	Deoghur						l	1		1	1				861	4,161	39,0
, .	- 1	Dibru-Sadiya	ļ		1		ì	•••	""	•			•••			•••		•••
B (6	- 1	Hyderabad-Godavari	25	427	48	699	60	909			/··	***						
8	- 1	Valley. Jodhpur-Bikaner .	17	143	1	8	100	1,736	43	172	222	603	275	3,303	93	1,113	766	7,3
. 1 .	to	Madras		3		2	9	43	22	86	1,907	9,6⊍3 480	212	1,%1	2,096	11,059	4,364	24,9
(4	)	Morvi		13	İ	1	,	-0	1	25	161		77	214	53	407	323	1,2
2 (8) 4	k (a)	Rajputana-Maiwa .	1,361	33,838	205	1,815	208	4,549	}	2710	1.55	12.510	11	43	23	86	40	1
to (s	98) [	Rohilkuad and	12	85	433	2,002	21	101	350	3,510	1,665	10,518	2,381	30,161	2,082	31,464	8,434	1,15,8
1		Kumaon, South Indian	534	5,981	201	1,176		1	1	101	889	2,699	749	8,777	79	748	2,213	9,50
		Southern Mahratta .	349	4,975	257		834	2,803	593	3,990	5,048	47,860	2,709	20,017	761	7,177	11,125	88,9
	1	Udaipur-Chitor	20	110	{	2,092	228	3,523	8,996	36,553	21,727	68,006	6,636	49,441	623	5,336	38,836	1,69,2
"	"	2' 6" gauge.	20	110	1	5	4	34	3	12	2	12	58	405	26	186	113	7
.		Baraset-Pasirhat Light								}	1	1						1
5	-	Barsi Light		43		71	•••	•••										
1	"	Bukhtlarpore-Beliar				''			15	36	1	4	404	1,113	53	166	517	1,4
_	- 1	Light, Cutch		•••			٠٠.				•••						•••	
0	- 1	Kalka-Simla			٠						'	 #30			27	74	27	7
1 (0	. 1	Mourbhani			1	-		•••	***		90	503	4	A1	36	833	140	1,42
1	d)	Parlskimedi Light .				•••	•••		35	67	21	54	7	16	3	Đ	69	13
0 (0	- 1	Powayan Light		<b>′</b>		•••			170	208	142	16.	108	97	•••	1	418	40
3	1	Tarakeshwar-Magra	""							•					.,			
	- 1	Light. Texpore-Balipara Light					•••	**	•••			•••	*		•••		,	
Ί.	-	2' 0" gauge.			""									••	•••			
, .	_	Darjeeling-Himaleyan			,													
	- 1	Howrah-Amta Light .			_	50		3				•••	3	43	36	776	41	87
. 1	- 1	Howrsh-Sheakhala	""		•••	•	***					•••	•••		***	***		***
	- 1	Light. Jornat										-4			,	***		
	1																***	
1	1	TOPAL 1908 .	7,621	1,54,588	9,018	1,00,851	7,050	1,17,734	50,666	6,08,747	83,056	4,05,373	66,159	7,10,507	30,187	3,82,040	2,83,784	24,20,
1 .	i	TOTAL 1905 .	7,130	1,60,301	8,953	95,176	6,400	1,00,808	79,278	6,78,376	68,821	3,38,740	63,191	6,61,013	30,970	3,50,594	8,64,843	28,88,
1	- 1	INCREASE .	491	<u> </u>	RZ	5,676	551	10,928	1,888	,,,	14,285	66,683	2,968	40,494		••	18,919	41,72
1	- [	DECEMANE .		8,833						1			1.					
			***			***	i		í	66,629		***			783	18,554		1

DIX 17-continued.

#### rarnings therefrom during the calendar year 1906.

nd is therefore not the same as the total production.]

Nume			pag+.}	following	continued on	(IX	<del></del>		II.	VI			<u>-</u>	v		
4				n Putem.	GRAIN ANI		-	•					DER.	Fop		
Main head	4) the husk.	1	-	(3 Rice in t	. 1	Jowar ac	1) ad pulse.		nd voget- fresh.	Fruits a ables,	al.	Tot	raw and	Hay, st gra	l) nko.	3
	Earnings.	Quentisy.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Q.antity.	Esrongs,	Quantity.	Es ra laga,	Quanti'y.
	ns.	Tons.	Re.	Tons.	Rs.	Tons.	Rq.	Tons.	Ωн.	Tons.	Rs.	Tons.	R4.	Tons.	Rs.	Tons.
	23,95,561 3,61,790	833,731 88,561	7,24,036 30,436	150,315 7,966	17,396 1,30,194	3,~51 29,36 •	7,52,591 5,80,781	89,513 100,507	59,702 1,61,206	7,508 30,370	53,510 7,95,434	11,777 14),324	34,984 7,10,914	6,615 128,628	29,526 81,370	6,137 11,696
	8,94,341	305,564	<b>9</b> ,19,785	273,841			1,73,040	49,463	30,829	9,435	61,623	33,200	32,441	22,840	29,184	12,469
	13,50,568	313,803	3, 40,731	84,824	2,67,821	8 870	17,31,061	250,620	1,37,247	9,720	2,48,772	76,700	89,308	ยะ,09ว	1,97,111	38,000
	7,61,666	112,301	8,668	2,10	17,63,611	249,609	28,42,045	801,075	1,75,187	17,787	5,75,567	102,80	4,34,707	71,356	1,37,070	29,849
	9,45,765	216,239	6,34,393	140,577	7,53,261	118,1 7	6,21,911	90,410	1,0+,'717	16,917 2,724	64,720	15,550	15,020	3,317	54,109	12,213
	1,30,803	20,5.13	6,060	1,0.7	1,91,615	51316	100,191	24,786	2,01,590	26.2 7	19,910	3,093	11,618	2,758	5,201	911
]	13,02,869	195,516 32,699	1,85,60 <b>9</b> 72,890	19,068 12,000	1,47,09	177,6 A 37,728	37,49,352 3,12,759	466,948 91,116	43,901	10,250	3,50,077 81,232	28,6-3	8, 49,413 60,309	8°,034 23,705	51,284 14,973	11,270 4,975
1	6,37,915	185,251	56,378	18,757			30,504	4,757	6,117	1,325	14,880	3,319	5,718	1,100	9,103	2,159
1	8,94,618	219,806	2,61,600	64,616	1,00,193	19,243	4,02,620	10/,369	71,53!	27,031	48,119	11,917	1 1, 165	4,210	33,953	7,677
1	50,745	15,283	4, 153	2,8,5			8,110	2,650	144	25	3,470	G-96	1,350	417	2,117	150
1	39,195	10,574	1,183	324	53,560	19,678	19,945	7,018	22,275	4,779	16,318	1,321	11,492	3, 1.3	4,676	871
1	4,62,781	+3,9.6 	24,89,75» 	 659'818	15,474	1,414	1,81,731	25,738	2,32,126	31,075	11,100	2,649	4,316		0,781	1,766
1	78,421	17,102	•	·			10,785	1,511								•••
	76,277	14,263	171	71	2,63,350	39,601	62,09J	12,256	6,201	721	11,621	2,935	414	105	11,173	2,520
1	2,09,725	46,9.1	17,350	5,267	4,71,640	89,921	94,9 6	17,778	7,523	1,309	24,275	10,457	23,000	10,294	683	163
	42,315	17,645	7,747	8,881	5CB	2.27	0,5(3)	3,272	2,031	800	1,747	775	810	ьр	1,417	686
1	568	207	85	16	753	477	1,669	1,321	431	178	293	116	222	7.1	73	43
	. 3,91,452	69,785	24,137	2,799	6,87,-10	62,930	17,51,616	167,947	2,67,532	30,871	5,25,911	130,153	8,03,9:(1	125,123	21,080	5,333
	91,540	10,234	27,740	8,100	12,773	4,589	85,063	34,803	20,095	4,130	JN 657	6,795	17,263	6,319	1,334	447
	5,06,255	141,340	4,09,317	123,027	2,12,622	37,623	3,83,8-5	ព ឧ,វ៦	1,73,341	31,444	1,36,000	42,613	3,401	656	1,33,424	42,187
	6,01,537 3,005	72,793 771	53, 160 17	13,8:3	7,68, 4 5	119,600 60	9,50,243 6,213	59,891 1,581	75,429 644	11,663	1,06,125 2,483	- 26,770 669	73,171 2,432	17,549 654	32,946 51	0,227 15
		<b>"</b> .								•••				***		
	2,826	1,953	290	136	13,951	6,118	9,799	4,285	134	41	226	บด	13	7	213	99
													***			***
	2,476	852			8,031	2,563	509	207	17	6						***
	5,711	593	135	19	362	åä	16,638	1,835	6,039	823	5,064	624	3,031	421	1,110	100
	8,198	4,814	1,174	827	1	1	155	73	97	80	33	17	33	16	3	1
	986	1,180	747	1,001			864	499	20	23	25	27	2	2	23	25
1							846	524			··· }					***
1	119	106	3,476	8,304			28	19	1,549	1,790	2,007	1,428	5	5	2,02	7,423
1		•••	2,343	490	•••		1,260	263			2,010	971		•••	2,010	971
2	1,43,801	12,078	197	14			13,790	1,835	1,967	93	701		148	10	553	63 
								101								
														•••		
	1,24,75,853	2,506,462	F5,33,5J4	1,57",881	69,93,255	1,142,250	1,30,42,142	1,980,499	18,58,885	277,463	32,68,764	758,428	26,16,478	- 554,681	8,72,291	199,764
	1,11,50,426	2,049,109	58,00,665	1,300,750	80,53,638	1,169,333	1,08,59,253	1,091,688	19,39,752	276,655	21,88,720	6 514,944	13,88,057	819,918	8,31,663	195,031
	13,45,427	457,361	6,59,929	200,502			30,82,887	288,811	19,138	799	11,02,044	243,481	10,01,410	239,748	40,628	4,733
				***	10,61,383	27,083					****		150			494
	1											(	,-			ş 💯 💮

13

APPEN

#### Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Col.   10   Col.   Co	3	NUMBER.						71					~	
Rullware ystems, which Apprecials 38.   Whitest.   Whitest.   Books.   Totals   To					*		GRAI	N AND PO	JLSEcom	cld.				
Fig.   Property   Pr				-		at.				1	Тот	LL,	(6)	Ніря
Col.   Col.		1		4						}			Dressed or	tanned.
Col.   Col.		Sub-nead,			Quantity.	Earomes.	Quentiey.	Eatungs.	Quantity.	Ermings	Quanti'y.	Earnings.	Quantity.	Earnings.
			5/ 0" cango		Tons	Es.	Tons,	Ra.	Tons.	Rs.	Tons.	Rs.	Tone.	Re.
Col.   Col.   Col.   College   Col.	,	(a), (b) & (c)			59, 105	5,29,858	4.914	30,910	6.750	21,504	618,500	43.71.926		
Selection Integral Mate   25   25   25   25   25   25   25   2	,	(a), (c) to (f)	Bombay, Baroda and Central India		- 1		- (	1					,	
Seek Indian	,	& (m) & (v)	Eastern Bengal State		2,154		11,341	87,692		10,781	- 1		1	1,40,05
(a) to (1) Madras (b) Strain's Genaratical State  2,044  2,054  1,1001  2,044  1,1001  1,100	.	1	East Indian		283,902	22,75,257	51,416	4,37,791	77, 197	1,30,718	1,120,982	69,35,950		9,36
(c) is c) Martens (c) (a) Martens (c) A Mart	۱,	1	Great Indian Peninsula		175 015	13,85,206	24,231	2,15,317	ı	3,58,958	916,832	71,35,925	76	1,0
North Wedom State	,	(a) to (d)	Madras	.	3,318	17,639	5,616	27,906	61,897	3,89,896	642,024	92,91,482	1,303	12,90
North Western State			Nizam's Guaranteed State	٠  ٢	2,654	13,063	1,662	9,938	1	0,329	105,208	4,84,067		1
Avana-Dergel	.		North Western State	$\cdot$	1,169,851	1,22,01,138	69,304	2,97,662	96,589	5,41,845	2,214,972	1,95,93,610	153	g.
A seam-Brougal	-		Oudh and Rohilkband State		127,173	7,90,859	13,002	69,047	90,323	4,70,253	400,191	19,63,206		
Mercy   Martin   Ma	1		9' 111' manno			-								
Rengal and North-Western			·			007	1 020	13.100		KON	710 544	n no ann		
Dec gal-Posno	١	i			l	i	1	1	1		1		1 1	
	١	į.			- 1	1	1						- 1	
Norman	1		· ·		,	1	i	- 1					i i	
Decabura   Dibra Badiya   Dibra Ba	ł					1			1				1 1	
Color   Others Saliys   Color   Colo	1				3		ı	į	1				1	
(c) Hydrobad-Godwan Valley. 7,772 G0,013 U0 1,300 300 1,000 74,535 4,85,850					- 1		i	- 1					1	
Color   Colo	١				i		i	- 1			•			
(c) to (8) Madraw . 181 750 751 8,001 5,588 28,105 31,005 12,410 10 Mors . 518 750 57,140 177,270 110,000 12,00 13,814 5,7630	1			- 1		1	1	· i	- 1				i !	•••
10		l .	• /				1		1				i 1	
2 (b) & (g) to (m) Rejputane-Maiwa	-						1						1	
(a) & (b)		(b) & (a) to (m)	Rajputana-Malwa				ì	1			1		1 1	
South Indian		4	Robilkund and Kumson		\$7,923	69,328	1,578			1,13,305	132,37.1	3,44,629	1 1	
Southern Mailratia		į.	South Indian			2,088	2,231	- 1			i		1 1	
2 G" gauge.  Raraset-Rasirinat Light		1	Southern Mahratta		13,187	79,562	5,065	19,391	21,360	1,01,514	306,409	30,21,112		
## Reraset-Basirhat Light		ì	Udaipur-Chitor		3,410	14,479	42	453	2,32	8,193	8,215			
## Raraset-Basirhat Light			2' 6" gauge.	-										
Barst Light														
Bukhtlarpore-Behar Light		1	"			1 1					1	1	1 1	
Cutch		1	Bukhtlarpore-Behar Light			1 1						1	1 1	
Column		i	· · · · · · · · · · · · · · · · · · ·			l i					Į.	1		
1 (c) Mourbhanj		1				1				ł	1		1	•••
1 (d) Parlakmedi Light		1				1			Ĭ.	Į.	1	1	1 1	
Color   Powayan Light		1	Parlakımedi Light		19	15	10		ì	219		1	1 1	
Tarakeshwar-Nagra Light		1	Powayan Light	.	1,648	2,046			1	3,091	1	į	1 1	
Tespore-Balipara Light		1	Tarakeshwar-Magra Light				126	1:30			3,585	3,761	1 1	i
2' O' gauge.  Darjecliug-Himalayan			Tespore-Balipara Light						1		749	3,603		
Howrah-Ania Light			2' 0" gauge.											
Howah-Sheakhala Light	5		Darjecling-Himsleyan		2	31	1,437	23,900	341	5,095	15,907	1,86,344		440
Howrah-Sheakhala Light	16		Howrsh-Amia Light										.,.	
TOTAL 1908 . 2,279,163 2,00,01,605 225,730 15,16,751 975,707 58,31,755 10,060,162 6,73,92,858 29,363 1,61,  TOTAL 1908 . 2,673,394 2,46,35,824 181,801 11,55,604 853,275 54,38,180 9,879,818 3,71,50,822 30,669 1,62,  INCREASE	7	1	Howrah-Sheakhala Light			]								
TOTAL 1905 . 2,673,394 2,49,35,824 181,001 11,55,604 953,275 54,38,150 9,670,518 6,71,50,522 30,669 1,62, INCREASE	8		Jorhat	•			\$							
INCREASE 48,769 3,58,887 22,433 3,96,605 680,646 1,42,083 19,			Total 1908		3,259,163	2,00,01,505	225,730	15,15,751	975,707	58,31,756	10,660,102	6,73,92,85	6 29,363	1,81,
			Total 1905		2,573,394	2,46,95,624	161,901	11,55,604	953,276	51,35,150	9,979,518	6,71,50,82	30,059	1,62,
Degrees of soldier			Ingrease				48,769	3,59,897	22,433	3,96,608	690,648	1,42,083		19,
		1									-		<del></del>	

DIX 17—continued.

# earnings therefrom during the calendar year 1906.,

and is therefore not the same as the total production.]

				· -				X1		X1					XIII.			
IDES A	ND BKI	NS.				<b></b>			,						ICTE.			
) GATIL	E.	Suins	AMIKA (2)	P AND C	тняв	To	ī A.J.	Hore	.5,	liemp () and et fibr exclu-	hor en lung		1) 1.W.	() Ounny clot	2) bugs and lb.	† To	TAU.	
(b Ra	w.	(a) Dresse tunu	d or	Ruw	). 			,								1		
Quantity.	Earvings.	Quantity.	Earnings.	Quantity.	Сатиюдз.	Quantity.	Earnings.	Quantity	Karntsfre	Quartity.	Earnings.	Quant.ty.	Earnings.	Quantity.	Earoit gs	Quantity.	Carnings.	
Tons.	Ra.	Tons.	Rs.	Tons.	Re.	Tons.	Rs.	Tons.	Rs.	Tons.	Re,	Tons.	Rs.	Tons.	Rg.	Tons.	Rs.	ĺ
	1,25,511					11,491	1,25,541	406	3,292	8,365	51,175	16, 137	57,°\$1	22,820	2,17,245	39,263	2,75,066	
1,659	16,360	3	61	2,890	36,350	4,653	52,80G	173	2.207	2,103	20,099	375 829,188	8,810	11,818 23,835	76,916	12,193 853,023	62,726 61,09,466	
		2,46:	13,718			28,191	1,53,345	163	786 9,645	12,033		157,917	9,06,471	E3,517	7,40,010	211,464	15,60,494	
	6,02,027	425	2,089	. 1	1,01,651 2,32,936	54,923 ° 20,745 °	9,01,471	1,535	20,420	11,210	36,290	1,21	13,798	29,066	2,97,248	31,176	3,11,044	i
6,305	51,373	3,507	41,936	- 1	3,06,036	45,447	1,11,618	986	8,120	7,419	ac,303	144	1,030	18,161	1,33,679	18,309	1,35,718	
911	9,542		3	2,7 53	24,306	3,660	33,865	223	1,796	702	5,415	711	137	2,919	21,919	2,330	21,961	
16,686	1,42,513	178	2,137	17,355	1,90,076	34,372	3,70,305	287	2,399	007	6,170	173	1,007	53,393 9,702	4,43,133	53,483 9,871	4,44,427	
6,153	44,HF/4			4,180	18,698	10,333	63,562	643	2,490	16,037	30, 422		1,007	-,,	,	1	27,000	
		_					11 01	7	100	323	1,461	95,439	2,21,098	784	4,034	96,223	2,25,742	ĺ
849	11,291	<b>%</b> .	165	29 3,349	325	19,018	11,616 81,328	125	764	6,977	42,15	7,635	39,148	16,799	90,701	24,134	1,35,962	
9,939	63,391	6	25			143	1,237					10,772	47,900	125	155	10,-97	48,355	
208	1,235	17	190	624	3,709	851	6,151	5	29	1	5			1,698	6,646	1,398	8,696	
3,161	34,108	2	29	51	476	3,267	35,175	43	602	7	70	15	243	15,193	63,859	15,208	6i,10i) 	
															···			
				850	9,15!	1,231	14,407	42	526	141	1,471	3	24	2,137	21,051	2,840	21,478	
381 470	6,316 4,410		15	1,000	9,108	1,573	13,699	1	9	117	207	10	51	1,620	17.283	4,630	17,383	
70	197	51	105	1,068	2,265	1,205	2,624	12	31	533	1,583	1	1	704	1,081	705	1,962	
39	126	4	9	60	205	103	340	3	8	2,839	18,321	 508	6,490	166 16,581	430 1,12,100	166 17,089	1,17,599	
3,737	43,821	10	143	6,563	64,100	10,410	1,12,089 6,410	111	443	2,014	H,( 68	7	27	2,033	9,644	2,030	9,671	
893	4,412 35,230	1,365	21,416	469 8,715	58,078	15,364	1,27,160	227	1,081	3,715	29,093	135	1163	11,510	63,528	11,675	04,711	
1,936	16,627	230	1,184	11,41;	80,321	13,739	99,568	407	4,364	1,563	14,265	4	35	H,611	55,694	8,615	55,910	
113	698		1	156	768	269	1,455		2	3	15	1	4	204	035	205	939	
,																		
77	211			86	236	163	447	5	15	21	57		2	1,123	3,609	1,423	3,611	
•••										11	38			41	122	и	122	
	420			23	200	 02	691			14	235	1	24	125	1,395	126	1,410	
89 3	8				-	3	9					1	3	137	231	138	234	
305	266					80	266	1	1			5		40	53	54	1.57	
					-					474	266	1,508	1,940			1,508	1,940	
20	72				-	29	72							•••				
				6	83	265	3,394	7	136		7	1	43	142	1,853	143	1,996	
259	3,811	•		"		-												
	-																,	1
•••					-			ļ						<u> </u>				
119,131	14,68,01	8,338	88,645	127,403	12,57,918	284,315	29,97,127	6,649	61,292	101,143	G,8 <b>4,</b> 150	1,121,570	72,42,064	311,180	25,35,805	1,433,765	97,77,889	
91,527	10,38,13	10,638	1,15,655	111,056	11,10,48	248,975	24,27,612	5,021	85,826	92,810	6,08,063	1,027,320	<b>64,58,4</b> 30	816,315	26,93,974	1,343,638	91,42,404	
27,604	4,85,791	\ <u></u>		15,637	1,41,480	10,110	5,09,615	1,028	5,466	8,392	90,093	94,256	7,88,654		,	89,120	0,35,485	
		2,296	27,010	-	·			-		<b></b>				5,135	1,40,169		,	

APPEN

## Principal commodities carried by railways and the earnings

[The total quantity of each commodity represents the total weight conveyed over all railways in India

;				-	XIV.				xv.			-			,
						•		LEA	ATHER.						
in id.	Sub-head.	Bullway system, esd. Appendix 38,			Lac.	Un	(1) wrought.	but but	(2) rone ht, cepting ots and nus.		Γota <b>l.</b>	Al⊎	(1)	kunds	(2) nes and rits of ar site ladi
				Quantity.	Entugs.	Quantity.	Eartings.	Quantity.	Earnirgs.	Quantity.	Earnings.	Quantity	Eathings.	Quantity.	Earulngs.
		5' 6" gaugo.		Tons	R.s	Tons.	-	Tons.	-	-	-}	-	_	1 3	- -
1	(u), (b) & (c	Bergal-Nagpur	. )	7,71	1	1,230	1	lons.		1,230	ļ	Tons	ł	Ton:	
2	(a), (c) to	Bombay, Baroda and Central India		. 20	1	1,160	1	680	13 039	1			1	1	1
3	( f )& (n) & (v).	Eastern Bengal State				1				1	20,200	<b>'</b>	7 14,34.	4,360	8 30,1
4		East Indian		1,27	i	6	1	41	1		317	84	3,67	01	5 14,1
5		Breat Indian Permanta	•	21,01		1		1		} '	1	7,14	1 50,530	2,61	0 81,1
0	(a) to (d)	Madras		10:		977	1	1,263	!		1		1	1 0,92	1,18,
8	(a) & (b)	Nizam's Quaranteed State	•	, , , ,		4,217	1	1,313		1		1	1 '	6,96	9 46,1
9		North Western State		1,52;		1,235 2,715	1 '	179		1			1 '	- 1	0 7,
0		Outh and Robikhand State		979	1	1	1	1,6.9	1	1	1	1	1	1	1
		, 3'31" gauge.	•	1 "				162	1,7 10	192	1,740	5,12:	19,600	2,03	34,6
1		Assam-Bengal		745	7,117			2	j : 34	3		1			
2		Bengal and North-Western		2,170	1	138	l l	98		236	1	ı	1 . 20	1	
18		Bengil-Domas		,	30	۱						Ί"	20		.
4		Bhavnagar-Gondal-Jucagad-Porba dar .		2:	68	719	1,674	40	1	352	1	ŀ		1	1
5		Barma		1,300	21,656	39	513	56	1	0.4	1	ł		817	1 -,,
6		Desghur						<b></b>						1	1
7		Debru-Saliya										69	1,149	1	"
в	(^)	Hyderabud-codayari Valicy		17	169	19	180	71	1,318	90	1	ł	1	30	. 4
•		Jodhpur-Bikane		358	1,990	159	1,417	1 15	1,787	301	3,201	i	1	ì	-
3	(e) to (h)	Madrus			ű	29	1 (3	10	40	39	183	1,75.1	i	337	1
0		Morsi		4	15			76	40	10	1	9	1	9	
16	b) & (g) to (m).	Rajput ma-Ma'wa		631	£,625	728	7,042	វារថ	7,102	1,124	15,944	2,306	17,046	1	1
,	(a) & (b)	R. blikund and Kumnon		222	กเร	6	38	34	209	33	246	1,130			
1	]	South Indian		105	1,113	13	100	24	313	37	412	463	1	197	1
1	]	Southern Mahratta		63	839	1,053	10,311	50	856	1,139	11,147	1,671	2,703 14,310	4,009	1.4
1		Ddalpur-Chitor ,		2	14	11	65	6	42	10	97		1	2,777	1
	I	2' 6" gauge.							_		"	l "			
١.		Bainsot-Branbat Light						•••							
		Bars: Light			2		2	10	46	10	49		]	10	,
		Bukhtian jore-Behar Idght						*							
		Cutch				4	11	•		4	11				
1		Kalka-Simla			1	8	63	21	507	21	630	1,655	11,937	149	3,43
		Monthing		1	3	•••	1			•••	1		1	8	1
		Parlakimedi Light	• •	•••		2	3	•	#*	2	2	1	3	69	1
		Powayan Light	• •			•••		•••		•••					
		Tarakeshwar-Magea Laght	٠.,	10	18			·••		***	•••				
		Tespore-Ballpara Light	• •											20	12
		Darjeeling-Himalayan		١.				į						1	1
		Howrah-Amta Light	: '	6	97	***		6	194	6	194	541	5,159	201	6,02
1		llowrah-Sheakhala Light		•••		,		•••		•••		***			
	- 4	Jorhat					···			**	,			•••	
			•					***				•••		***	
		Total 10(	X8	42,404	5,63,477	15,533	2,16,543	10,460	1,73,676	25,993	9 <b>.9</b> 0,219	49,551	4,77,517	45,708	5,69,76
		TOTAL 190	os .	41,140	6,52,436	11,936	1,70,520	9,234	1,91,545	21,170	8,62,066	51,171	5,24,723	41,181	5,07,28
ì	1	_													
		INCREASE		***	11,041	8,697	46,029	1,226		4,823	28,164			4,717	

DIX 17-continued.

#### therefrom during the calendar year 1906.

and is therefore not the same us the total production,]

XVI.									XVII-	(contil	-	em page	).					Nomber.
iQUOB	3.	-							_	M	TALS.						`	
(3 All other including and fer liquor than i	r soris, g toddy mouted other de and	Tol	tal.	(1 Isra unwro	JAH. 1	(2 Bra wrou	ēΝ,	Copp Copp	por.	(1 Capp Wigt	H-L.	(, C n	ı)	- (	(5) ND STE		 (c) rought,	Main head.
te:	r																	
Quantity.	Farnings.	Quantity.	Earnings.	Quantity.	Earmogs.	Pranting.	Estumes.	Quarate.	Earnings.	Quartur.	Earmings.	Grantity.	Latt in Zn,	Qunetity.	Estuings.	Quentity,	Karuegs,	,
Tons.	Rs,	Tons.	Rs.	Tons.	R 4.	Tons.	R#	Tons.	Ka.	Tons.	R	Tone,	R.	four.	Rs.	lous.	Rs.	
		2,395	19,00			1,990	21,690			553	2,54.7	H75	7,195			40,353	1,55,033	1
1,631	9,405	7,514	58,263	1,3.0	17,201	F () ()	11,497	853	4,953	612	8,414	1,342	15,343	591	6,433	25,450	2,83,899	2 .
		1,296	17,850	1,281	7,315	3,021	21,914	152	47.2	202	1,190	270	٠,	750	2,433	50,128	2,74,126	3
5-0 27	4,144	i	1,13,786 2,31,704	2,250 3,078	20,023	2,323	96,249	102	1,522 17,492	787 1,201	13,812	2,815	10,1-5 47,573	4,220	53, 192	74,200 04,600	9,52,021 10,93,925	4 *
5,230	30,511	1	1,20,791	2+7	2,529	1,848	19,103	72	760	406	6,191	308	4,122	1,610	16,2-0	16,925	1,52,742	6
1,001	8,216	4,383	32,508	233	1,917	249	2 635	332	2,059	19	613	125	1,219	2 653	19,126	2,5%	27,422	8
549	9,038		2,29,407	CCD	10,231	2,210	31,168	418	5,669	666	10,751	2,134	50,392		37,490	£1,618	8,25,569	9
•••		7,157	49,151	feo	573	3,194	19,710	3	39	229	J ,506	953	5,023	17	111	18,941	75,310	10
		641	4,223		2	21.0	1,927			з	31	16	83	1	11	4,185	27,732	u
		359	9,764	195	1,593	1,822	13,702	6	66	87	629	UE0, t	8,672	5°8	2,641	9,1.48	<b>ខ</b> ខ3,៩១	12
		27	278		1	11	60			1	2					1,267	12,358	13
23	530	3,439	1,547	307	913	272	3,190	38	612	35	573 480	306	1,250	215	120	1,427	8,212	14
	550	3,333	45,563	46	3.9	218	3,130		245			7:6	1,519		2,031	7,691	52,120 	15 10
		69	1,048									1,395	32,594					17
055	3,456	711	3,990	28	223	180	2,398	2	23	19	210	121	1,136	617	8,344	2,338	25,293	Я
27	162	197	1,986	19	F6	160	1,418	1	17	125	674	1,095	13,561	152	702	2,530	11,778	18
48 24	299 93	1,521 30	6,829	2 2	13	37	99	8	68	31	222 13	65	614	18	1/26	992	5,803	c.
212	2,730	4,027	43,119	1,330	26,613	2,005	20,198	304	8,143	371	5,16.2	703	81.009	1,(49	 6,761	250 18,324	094 1,81,341	19 2
1	5	1,327	8,609	91	461	468	2,755	4		. رو	280			126			. 1	
523	1,847	4,082	33,780	877	6,522	948	10,561	65	27 451	106	1,711	C8 939	224 16,221	2,121	13,007	4,041 7,539	20,158 60,055	20 21
<b>42</b> 3	41,010	12,671	76,526	150	1,760	967	9,601	ья	1,0-6	4.73	1,591	752	5,315	5,153	25,866	6,588	55,706	22
	•••	6	59			9	<b>(4)</b>	2	8	*	33	7	20	16	260	:31	1,975	23
***																		26
•••		10	38	3	10	49	153	2	6	83	104	2	7	3	Ð	1,751	2,706	25
•••	•••	***	•••	•••			•••					•••			•••			26
21	515		15,996	3	31	5 26	17 456			33	14	 227	3,061	257	3,500	. 464	7,510	27
100		8	29			13	35	'				8	16		3,307	97	406	30 1
		69	64			4	5					11	17			119	101	1
•••		•••					·••					197	462					20
•••						98	89	•••	•••				•••	4	8			32
•••	"	20	126				•••	26	162					•			,	. 33
•••		742	11,191			33	745	•••	н.	8	208	38	916	3	57	5/14	11,257	* 36
•••		"					•••	141			•••							:)6
🍓		-						*							l "			37
19,867	111,091	115,210	11 59.297	12,630	1,03,734	31,641	1,85,747	2,050	44,21:6	6,120	79,099	98 310	2,91,040	87,7:0	3,35,93	110,077	42,70,914	
14,661		100,913			1,00,254	1	3,42,144		70,150	8,008	108,541		3,40,205	l			31,93,404	
			-		-	-									-,-,,,,,,			
5,208	44,097	8,303	19,965	771	36 690	F33	 a 307	1.509	75 900	1 000	30.546		45.910			73,217	7,77,585	
	<u> </u>		17,800	L "	36,520	•	6,307	1,503	25,900	1,888	28,546	P,089	45,346	8,627	91,458			

## Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight convoyed over all railways in India

( :	- 1		1		X,	V11.			1				χv	111.	·	<del></del>
N	TUVES.				MATALS-	-concludat.						•	Oil	ls.		
-			1				<u> </u>			- 1		,				
			Iron:	(5) भागे संदर्भ												.
		Raitway system, tide Appradix 38.	00	icluded.	1	(o !	т	otal.		(1) rosine,		stor.		(3) unut.	1	(1)
			Vana	(d)	l '"	nı [4.			1	onine,	`"		Coes	unu.		rland po.
			21.000	inctures.						1						
Ę.			l	1	1	١.			١.	<u>.</u>						
Main bead.	Sab-head		i i	iin J		Birivge	Tallett.	Eumaligs.	Quantity.	Earinus	Questan	Eartones	Quartity	Battinbe's.	Qu.ntity.	Earnings
N.	450		Quanti.;	Euri tage	Q <sub>T</sub> m	En:	6.3	Fig.	0	Eat.	-:	Ear	and	Ear	3	Earn
		,			i				6			1				
i		5' 0" gauge.	Tora.	R4.	Tons.	fis.	Tons.	11:e	Tons.	Rs.	Tous.	Rs.	Tous.	R«.	Tous.	Re.
1	(a),(b) & (· ,·	Hengal-Nagpur	8,669	00,-03	137,722	P.85,765	471,850	0,'64,952	20,421	2,92,343	2,826	23,501	1,125	8,360		1
	(a),(r) to (f j & (*) & (*)	Pombay, Birola and Centra, In- Ji	27,411	1,00,759 1	00,411	2,50,966	114,445	10,19,550	19,637	208,983	1,673	17,175	657	8,679	653	8,031
3		Enstein Bengal State	7,713	39,627	10,571	37,339	74,319	3,85,5-3	119,649	340,875	145	875	1,1:9	10,617	8,176	50,197
4		Enst Indian	25,136	3,80,324	7,990	1,36,855	193,711	17,14,645	99,963	7,51,902	1,07.8	20,422	2,370	21,098	10,672	1 26,241
5		Great Indian Peninsula	20,221	3.85,611	198 <sub>16-19</sub>	22,95,492	3.5,903	"9,41,015	62,502	8,93,118	1,272	1",493	2,677	49,919	73	\$19
6	(a) to(d)	Madras	16,831	1,53,497	2,51)	23,640	10,530	3,59,170	39,143	2,83 4 10	3,313	12,364	4,148	35,651	21	170
8	(u)&(b)	Nizaur's Guaranteed State  North Western State	1,/41	12,952	540	0,717	7,821	71,770	5,652	40,209	614	2,231	1.9	1,753	1	26
10	•	finish and Maketi to a local	17,001		5,079	05,316	81,952	13,20,516	29,566 19,749	5,86,569 92,108	1:3	7,697	1,345	1	2,417	27,194
10	··· •	3'33" gauge.	1,-17	27,0()	] ′	5,517	25,42	1	,		"	;	12	355	511	3,990
11		Assem-Bengal	1,120	11,780	1,733	15,918	7,212	50,919	13,311	41,467	J"	339	62	829	1,099	10,0.7
12		Bengal and North-Western .	6,777	45,418	7,107	25,683	22,710	1,51,501	23,875	1,03,729	375	2,520	209	1,655	1,143	10,480
13		Bengal-Daoars	75	912	101	6,653	1,769	19,991	1,835	6,770			30	111	272	1,241
14		Bhavnagar-Gondal-Janeged-Por- bundar,	634	4,5 1	268	1,201	3,9 0	20,169	4,022	15,954	192	751	54	420	76	101
15		Barma	9,2.9	1,01,52	270	3,379	14,610	1,68,372	9,787	63,297	170	i 1,070	717	8,569	23	31)
16		Deoghur		•••												"
17		Dib'u-Sadiya			1,157	9,250	5,5 (2	42,274	7,535	20,686						
8	(c)	Hyderahad Godarari Valley	938	10,503	201	3 800	4,685	5),011	2,365	22,031	111	1,000	138	1,198		3
18		Jodhpur-Pokaner	:01	2,481	512	3, 113	1,585	37,534	3,681	19 801	22 i	1,592	47	300	Б	62
6	(a) to (h)	Madras	300	2,236	82	733	1,625	9,417	2,304	10,101	22	7-5	672	1,278		
19		Morvi	37	150	16	60	151	1,079	269	817	13	28	0	19	5	14
2	(h) & (g) to (m)	R gputaga-Maiwa	6,587	80,005	59,056	1,11,651	83,000	4,53,25)	11,500	19,178	884	5,802	253	3,760	501	3,002
20	(a) & (b)	Rohi <sup>3</sup> kund and Kumuen	369	1,671	205	1,519	5,172	29,036	7,702	7,441	34	145	9.	R4	108	013
21		Sooth Indian	6,181	83(41	1,191	12,194	23,313	2,01,021	27,113	1,59,067	3,660	24,308	1,773	7,603	71	371
22		Southern Mal ratta	4,720	61,009	48,023	2 97,919	67,178	1,16,506	24,657	1,81,687	937	7,083	1,735	10,603		
23		Udapur-Chitor	12	71	52	J61	372	2,120	257	1,284	2	15	. 5	29		-
- 1	l	2' 6" gauge.													ĺ	
25	···	Baraset-Basichat Light		•••		,						···.	104		•••	
25 26		Bacd Light	204	<b>418</b>	26	100	1,373	3,93 !	5 15	1,305	6	17		-		"
27		Cutch	129				139	377	1;2	31,9			16		2	,
30		Kalka-Simla	205	0,278	55	1,400	1.276	20,722	664	7,151	4	83	! <b></b>	1	G	90
:3	(r)	Mourbhanj	25		6	21	149	815	47	15	0	11	2	8	5	12
1	(d)	Parlakimedl Light	6.	4	10	16	110	143	328	203	7	5	2	2		
20	(a)	Powsyan Light					197	402								
83		Tarakeshwar-Magra Light	10	7.3	١.	,	121	129				***	•••		173	236
53	***	Tezpore-Balipara Light			"		26	162				***			•••	
		2' O" gauge, Darjeoling-Himalsyan	450	10,430	146	2,816	1,217	26,439	772	10,030	3.	85	. 6	133	374	4,968
36 36	***	Howrsh-Auta Light	1450	10,430		4,810	1		ì	10,850	,				2/2	
37		Howrah-Sheakhala Light										·	,,,	***	***	
38		Jorhat											` <b></b>			
- 1																
	1	Total 1908 Total 1946		17,07,390	923,601 512,001	39,75,810	1,670,512	89,65,505	586,217		20,086 19,79%	1,48,884	19,7°F	1,91,731 2,04,460	20,071	1.87 700
		INCREASE	37,877	4,40,418	411,090	23,75,020 16,09,601	\$01,740	26,55,568	49,891	37,63,129 6,17,890	273	7,484	30,029	2,04, 900	8,032	56,108
·		Древилев								0,21,100			991	12,738	-,	
										77						

# DIX 17—continued.

## the carnings therefrom during the calendar year 1996.

and is therefore not the same as the total production.]

									XIX (	continue	l on full	owing pag	<b>-)</b> .					1 :
										0	r-argne.				<del></del>			Maxee
t) Oth		Tot	al.	(1 Cus	ľ	(2 Earth		(S Lin	3) saed.	(: <b>P</b> op		Rape	s) rapd tard. x	(i Til or			7) n sond.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Prantity.	Earnings.	Quantity.	Earvings.	ynantity.	Ea'ninge.	Quantity.	Larning.	Quantity.	Euraings.	Qusetty.	Earnings.	Main bead.
Cons.	Rs.	Tous.	Rs.	Tous.	Rs.	Tons.	Rs.	• Fons.	Rs.	Tong.	Re.	Tous.	Rs.	Топя.	RH.	Tous.	Rs,	
1,167	24,369	38,929	3,44,575			•••		14,579	1,29 365			6,766	41,383	28,283	2,31,803			
8,482	33,276	20,332	2,70,547	27,600	2,41,306	,366	12,432	5,818	53,891	13,168	93,697	19,068	1, 5,004	30,964	2,25,543			
1,793	4,815	;53,9 ·3	1,08,970	1,053	1,888	!		11,511	30,872	10	69	23,372	81,728	924	3,331	,		
3,063	60,449	110,026	9,70,141	21,745	1,66,305	216	1,594	120,918	8,11,430	36,517	2,57,382	130,1.7	11,27,273	20,740	1,50,259	47,967	3,98,171	
1,125	1,23,726	77,709	15,73,750	<b>\$</b> 0,631	1,92,528	8,829	18,032	04,595	11,01,300		2,16,116	: <b>#</b> -5	2,97,768	106,907	11,96,187	171,038	17,25,115	
3,356	81,203	60,543	4,13,081	35,030	117,02L	3,990	17,321	10	58	172	605	861	5,921	37,163	1,55,959			
584	5,254	6,656	55,475	53,165	2,91,589	70 j	577	6,975	15,433	116	578	104	658	19,523	1,19,03	6,753	27,303	
5,665	61,463		6,9-,977	177	1,536	201	3,410	1,219	9,700	721	1,361	50,2.1	5,03,801	12,311	89,434	112,343	6,24,017	
699	3,609	21,127	1,00,850	4,637	17,547	21	525	6,388	20,531	19,912	#2,232	12,931	52,352	4,157	17,292			*
151	1,326	14,779	50,008	50	. 74		4	75	160	2	۱, ا	2,170	10,713	3.13	1,184	16	126	
336	2,760	25,938	1,21,104	10,090	23,419	3B <sup>!</sup>	r(16	75,021	3,08,607	6,860	31,630	15,413	2,31,798	791	4,301	•••	,	
3	67	2,146	8,312			!						670	3,002					
011	2,613	4,942	10,579	3,058	10,620	258	1,149	6	15	669	2,033	1,259	6,343	5,331	17,986			
9,628	95,611	20,365	1,79,787	15	173	3,914	38,046	13	102	3	6.4	á	37	7,797	13,798			
														•••		w		
		7,839	20,690										•••					
794	7,566	3,408	32,007	190	1,183	73	F25	25,016	1,72,749	51	410	20	164	4,775	29,690	21,859	1,43,609	
825	5,733	3,779	27,548		3	23	133		1	6	20	7,189	25,210	5,079	21,696			
1,600	4,157	5,107	15,913	339	570	68	207				3	9	16	915	1,531			
71	233	101:	631	5	12	3	11			3	5	3	6	606	723	2,229	8,296	1
2,879	27,709	16,196	1,31,831	22,923	53,631	1,345	15,767	4,729	27,070	15,048	1,03,057	31,071	1,83,513	28,205	1,51,638	٠		
102	1,082	2,755	0,439	4,114	11,889	35	241	1,225	2,561	5,224	7,954	5,580	21,625	1,211	3,165			
6,491	63,111	49,520	2,54,400	5,551	31,400	104,515	2,00,950	4	10	49	310	1,139	6,026	23,570	1,40,826			
4,132	20,897	35,361	2,29,249	4,513	22,215	4,473	22,061	4,047	43,121	480	4,015	517	3,551	16,435	1,21,211	17,530	82,719	
0		270	1,374			9	75	78	200	531	1,080			956	2,769			
		İ																
392	1,102	1.017	2,727	157	351	1,333	3,081	9,631	21,502	16	 45		36	1,236	2,619	4,272	9,101	
	160	198	577			24	64			.269		19	23	41	133			
29	493	693	7,818	5	7			3	30	**	£3		2	2	31	42	480	
5	5	65	116	1	:							8	17	25	59			
7	7	314	217	7	6							20	10	149	101			
***									-			303	490	**				
•••		173	236									195	169					
685	214	886	914															
104	14782	1,250	17,806						,			<b></b>	10		7			
***																		
***																		
•••	***										٠			.,.				
33,805	6,29,702	730,527	54,64,678	227,503	11,08,671	130,805	4,09,501	300,070	27,01,000	116,384	8,05,450	368,512	27,69,793	8:0,507	37,88,593	883,078	:0,15,435	
6,884	7.18,845	6,85,772	50,05,242	199,415	10,12,961	124,905	3,70,919	122,797	81,58,420	96,693	7,12,181	957,120	24,93,237	308,836	28,61,009	380,027	29,41,904	
***		50,758	4,79,398	28,009	1,55,909	5,900	30,584		¥	19,656	94,299	11,392	2,65,495	47,671	3,74,671	8,951	***	
3,519	89,143			-1,	***			32,727	8,98,554		.,,		,				26,469	1

APPEN

#### Principal commodities carried by railways and

The total quantity of each commodity represents the total weight conveyed over all railways.

Nos	IDER.	1.7		XIX	i <b>.</b>	1	7, 1	1		1		'		XXI
-		v i		Опавроч	-concld.		XX.	1	XXI	' '				Pac
		Railway nyatem, <i>mile</i> Appendix 38,	(9) Othe	rs.	Tota	ıl.	Oplun	n.	Paper : posteba	and oard.	(1) Dried fru nut		(2) Ghe	
Men nead.	8 ab-head.		Prantity.	Esro.nes.	Prantity.	Eam:og⁴.	Quantity.	Earnings.	Quant.:y.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5' 6" gaugo.	Tons.	Rs.	Tons.	Rs.	Tons.	De.	Tous.	Bs.	Tons.	Es.	Tons.	Re.
1	(a), (b) & (r).	Bengal-Nagpur	11,631	52,837	.9,236	4,61,388	G1	1,713	936	16,410	11,150	89,684	3,318	41,0
	(a), (c) to (f) & (n) & (o),	Bombay, Baroda and Central	F,197	45,756	101,702	8,17,119	2,529	62,619	8,792	94,688	11,595	1,51,079	8,333	88,
3		Eastern Bengal State	2,051	10, 182	38,953	1,37,561	9	118	6,428	8,760	1,413	2,817	731	5,
4	.,	East Indian	F.C3, 8	29,943	8:3,6:8	28,50,260	8,900	2,19,031	10,350	1,75,662	0,859	88,206	17,072	3,80,
6		Great Indian Peninsula	12,107	08,380	197,717	49, 19,509	459	21,368	3,114	60,475	38,376	6400,049	11,668	1,85.
1	(a) to (d)	Madias ,	49,493	2,78,671	120,611	5,65,451	52	1.509	1,206	16,918	8,440	46,622	6,058	52,
1	(a) & (b)	Nizam's Guaranterd State .	2,753	8,67	5≅, (65	4,67,007	23	805	700	7,626	0,683	75,849	918	11,
10		North Western State  Oudh and Rohilkhand State	125,693 20,525	16,96,901 81,766	302,945 67,851	24,37,206 2,72,063	72 1,83 <b>4</b>	610 40,068	3,850	69,201 22,123	29,080 1,492	4,97,309 12,396	11,392 2,508	1,27,
11	*	Assam-Bengul	8	43	2,654	12,310	3	37	93	673	108	3,637	246	2,
13		Bengal and North-Western .	6,158	25,317	141,655	6,31,785	6,391	1,03,530	3,452	8,323	1,284	16,629	3,833	36
13		Bengal-Dooars	8	í.	678	3,045			19	67	ន	6	22	
14		Bhavongar-Gondal-Janagad- Porbandar.	14,549	2,0 <b>92</b>	25,151	₽6,C30	18	181	262	1,446	2,526 1,422	10,662	1,670	10
15		Burma	"	3,792	12,192	F6,111	26	471	711	11,172	1,922	11,314	1108	14
17		Dibiu-Sadija									976	6,597		•••
8	(0)	Hyderabad-Godavari Valley .	1,181	28,622,	56, 169	3,76,015	13	673	237	2,850	2,695	29,719	E20	6
18		Joshpur-Bikaner	34,933	1,23,037	47,230	1,70,099	29	458	93	710	2,479	11,207	6,282	63
6	(a) to (h)	Madas	1,950	5,028	9,241	7,374		🖠	26	127	40	170	190	
19		Morvi	244	467	3,091	4,510	7	17	15	171	٤3	240	55	
20	(b) & (g) to (m). (a) & (b)	Rajputana-Malwa	7,370	38,245 112	113,511	5,78,521	2,300	36,561 12,121	2,722 83	64,293 492	19,205 387	1,48,053 2,107	10,278 208	1,20
21		South Indian	2,758	13,614	17,461	47,037 3,93,072	ena .	1-,121	2,121	39,068	570	4,311	1,494	11
22		Southern Mahratta	7,095	38,177	63,169	3,37,976	2	42	658	8,552	29,421	2,07,184	4,425	36
23		Udaipur-Cintor	5	12	1,570	4,142	62	304	45	351	437	2,232	380	2
24		Baraset-Busirhat Light								•••				٠.
25		Barsi Light.	1,359	3,161	18,005	43,176			47	101	800	1,982	67	l
26	***	Bukhtiarpore-Behar Light								•••	"-	*	""	"
27		Cutch Kalka-Simla	40	110	127	362			30n	10 8,342	168 84	1,407	49	
30 1	 (v)	Monrhhanj	309	150 584	67 313	753 <b>6</b> 61	3	86	22	8,394 48	2	1,407	17	
1	(4)	Parlaklmedi Light	107	91	292	217			4	4	,	1	1	
20	(c)	Pownyan Light	.]		303	480						***	\	
32		Turakeshwar-Magra Light			185	169			8	18			20	l
:		Tespore-Balipara Light . 2' O" gauge.	. n	82	11	82							21	
85	1	2 0" gauge. Darjeeling-Humaleyau .	.1					6	101	2,708	36	716	21	
36	,	Howrab Amta Light .				19		"		<b>3,100</b>	"	'	"	١.
87		Howrah-Sheakhala Light .				·								,
86		Jorhat												
		Total 1908	. 316,555	25,86,511	2,290,314	1,61,19,976	28,361	5,03,638	49,654	6,00,500	178,083	20,24,089	92,100	11,78
		Total 1905	278,018	20,65,923	2,169,716	1,63,86,86	22,884	4,72,179	42,094	5,00,689	182,666	20,57,516	93,904	11,91
		Merroul	. 80,637	5,49,688	120,598	7,67,424	497	31,357	7,460	\$0,812				
	i	DECREASE					,				4,583	\$3,477	1,795	1.5

## DIX 17-continued.

## the earnings therefrom during the calender year 1906.

in India and is therefore not the same as the total production ]

Column										x	CIII.	- <del></del>					xx	ív,	
Part	) ¥6,				R	AILWAY	PLANT AN	D HOLLI	G-STOCE	CARRIET	POR THI	PUBLIC	AND TO	BIGH BA	ILWAYS.				
Part					(1	).	15	2)			Mater	i) rals.							
Tene, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Tola, Ba, Solo, Ba, Solo, Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba			To	otal.	engin tende	rs and	Certine trucks a	ges and ud parts	Steel re fish-p	a) ils and lates,	Sleepers of ste	and keys of and	Oth	7) 8(9.	Tot	ial.	Ba	lt,	-
Teal	Quantity.	Earnings.	Quantity.	Earninge.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Eardings.	Quentity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earpings.	
1,000	Tone.	Bu.	Tone.	Ra.	Tons.	Ru.	Tons.	Rs.	Tone.	Ra.	Tons.		Tons.	Re.	Tour.	Rs.	Tons.	Bs.	
8,255	5,387	74,421	10,855	2,07,626	377	3,646	839	2,355	3,549	14,324	46	368	86,9.,7	4,49,530	93,768	4,69,963	107,146	6,78,693	
	24,946	1,57,250	47,874	3,96,620	. 195	1,054	840	3,443	43,368	1,85,197	3,026	13,463	62,240	2,24,810	109,359	1,27,915	301,465	6,91,969	
1,0,0,0	8,329	62,218	10,478	60,478	200	1,220			191	563	93	90	19,175	35,076	19,081	36,936	96,526	4.41.107	
100,85 7,05,061 122,478 8,07,460 0 0 117 5 344 1,109 0,033 101 240 011 1440 2,035 1,106 10,040 6,15,045 1,114 1,11					2,253	31,122	1,684	15,861	1,412	8,294		1	1						
5,117         29,470         15,036         1,154.59            22         1177            22         1177	48,608	4,59,395	90,072	12,15,035	98	815	104	1,016	22,778	2,43,071	20,212	1,32,353	10,081	87,664	53,327	4,04,969	221,163	21,30,470	
11,465    1,565    2,165    31,450	108,436				6	117	5	244			101	245	051	6,017	2,253	15,955	104,648	6,1,5,036	
683   7,346   4,884   38,665                                 3,971   8,923   3,971   8,223   0,770   3,25,766     4,478   30,776   5,133   43,771										1	1								
1,000   10,104   10,007   10,104   10,007   10,104   10,007   10,007   10,104   10,007   10,007   10,104   10,007   10,007   10,104   10,007   10,007   10,104   10,007   10,007   10,104   10,007   10,007   10,104   10,007   10		1										1		***				· · · 1	
19,700 64,707 19,843 1,1,201 0 6 64 104 109	244	.,		,								"		5,000	3,011	1		-,, 0,,	
865	4,478			42,771					393	9,623			226	865	618	4,408	23,491	86,595	4
\$\frac{6}{40}\$ 25,450 \$0,400 \$640 \$22\$ \$160 \$30\$ \$\tau\$ \$\	•					1		103					177. 1			1			
40,046		1	1														. 1		ı
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3,661 17,677 7,100 86,070		1	5	1						l							1		
1,000 10,164 10,090 75,147 648 1,136 3 6 669 1,270 10; 210 9,524 10,810 4,888 13,470 24,139 1,16,888 6,131 21; 21,211 6,487 22,139 1,632 6,131 10,009 37,763 1,471 1,118 970 67 32 13 8 1,188 1,00 774 3,434 14,122 1,00,099 37,763 3,00,372 218 1,15 9 433 28,944 1,28,459 692 2,343 1,10,101 1,00,101 1,			i							l	1								i
6,118 21,971 6,457 22,106 1 8 mg 3 1.00 32 926 92 303 126 728 4,794 8,008 14,791 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.		1	10,080	75,147	548	1,436		Į.	509	1	1 1								
14,182 1,00,000 37,705 3,00,372 218 1,6 3 09 433 22,014 1,22,459 602 2.313 10,016 1,00,010 1,79,008 2,617,43 276,316 25,35,202 10,651 1,74,000 37,705 3,00,373 218 1,6 3 5 62 3,464 9,318 322 1,163 3,500 10,051 1,00,010 1	6,218	21,271	6,457	22,108	1	8			32	925			92	392	125	725	4,791	8,093	
656	879	1,032	817	1,471					1,118	970	67	33	13	8	1,188	1,010	774	1,434	ĺ
28,128	14,282	1,00,999	87,765	3,60,372	218	1,5 3	99	423	28,944	1,28,458	692	2.343	160,016	1,59,016	1,79,968	2,91,743	276,316	26,35,292	ĺ
19,905 1,35,304 63,641 3,77,675 3 10 791 4,830 0,711 51,694 717 2,603 7,280 14,637 16,533 1,103,006 67,817 4,88,201 9,65 3,405 1,722 8,359 1 1 1	656	5,459	1,251	8,054	3	35	26	* 66	35	52	3,496	9,316	. 322	1,163	3,890	10,651	20,083	<b>10,</b> 319	
905 3,605 1,723 8,359 1 1 1 1 3 3 9 5 13 1,620 6,818  82 287 6382 2,405		1	1		1	1	1	1	1	70	8	6	88N	2, 20	• 943	2,56	81,763	3,11,068	
82 267 039-2 2,405	-		1	1		í	l		1	1	717	2,593	1		1				ĺ
82 267 338 2,465	908	3,805	1,728	8,300	,	1		-		3	-		3	9	5	13	1,520	6,818	l
194 554																	***		
3,576 20,417 3,708 28,452	82	267	939	2,465				•••					2				3,920	9,311	
3,576 26,417 3,708 29,452		1			1		l	ĺ	1	1			" "				***	•••	l
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20 39									t	1			1				3 7 7		1
2,244 83,480 2,300 34,492	***		20	39													134	1114	
435,111 55,43,600 701,631 67,91,496 4,877 26,825 3,633 17,068 67,468 6,45,874 39,251 1,60,396 690,732 21,99,316 725,946 29,44,73 1,739,046 1,07,33,762 13,830 37,140 5,853 4,651 789 11,513 13,767 1,05,402 395 856	***	"	21	143			-			"	69	637	•••		68	587	4	26	
	3,244	R3,480	2,300	34,463													1,930	18,661	1
	***					-					1	ì		}	Ì	1 1			ľ
437,841 35,79,809 707,833 67,82,539 4,143 31,476 4,427 38,861 111,215 6,50,776 30,849 166,504 529,809 13,44,496 679,800 27,31,023 1,843,138 1,18,78,781 435,111 85,43,609 701,691 67,91,899 4,877 26,825 3,633 17,008 67,48 6,48,874 39,261 1,60,388 590,732 21,89,216 726,940 29,44,73 1,738,046 1,07,33,782 13,830 27,140 5,853 4,681 789 11,513 13,767 1,05,402 395 856 106,002 6,64,973	***										-								
435,111 55,43,600 701,691 67,91,496 4,877 25,825 3,633 17,008 67,468 6,45,874 39,251 1,60,388 590,732 21,89,215 725,946 29,44,72 1,738,046 1,07,33,782 3,13,250 37,140 5,853 4,651 789 11,513 13,767 1,05,402 395 856 106,002 6,64,973			-					-		-	-		•		-			·	١
18,890 37,140 5,853 4,651 789 11,513 13,757 1,05,402 395 856 105,003 5,54,973	-					-					1		-	-	-	-			1
12,290 27,140 5,853 4,651 789 11,513 13,757 1,05,402 395 856 106,002 5,64,972	435,171	\$5,43,660	701,691	67,91,496	4,877	26,825	3,638	17,068		5,45,874	29,251	1,66,286	590,733	21,89,21	725,940	29,44,73	1,738,046	1,07,33,782	
	19,890	37,140	5,853	•••	-	4,651	789	11,513		1,08,40	395	856					105,003	6,64,972	
	***		-	8,907	734	-	1		-	-	-	<del> </del>	-	-	-	-			١

15

APPEN

#### Principal commodities carried by railways and

(The total quantity of each commodity represents the total weight conveyed over all railways in India

Numbe.				xx	v.							XX	VI.				
T		PALT	PETER A	ND OTHE	LE SATINI	ACBSTA	NCES.		<del></del>			Sig	ĸ.				
	Railway system, vade Appendux 34.	(I Saltp	- 1	(: Other	sn'ine	Tor	IAE.	(u	Bu	1) w.		(u	<del></del> -ī	?) goods.	,	Tot	al.
}								Fore		Indi	- 1	Fore	- 1	Indi	i		
Bab bead.		Quantily.	Earnings.	Quantity.	Exraings.	Quanty.	Earnings.	Quantity.	Earnings.	Quentity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings,
	5' 6" gauge.	Tons.	Ra.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs. €	Tons.	Ru.	Tons.	Rs.	Tons.	Rs.	Tons.	Rø.
1 (a), (i	1									500	8,439	•••				509	6,430
10 (f) to (f) & (n) &	nombay, Baroda and	2,152	17,912	1,630	19,820	3,672	30,702	262	6,034	30	2,317	50	1,570	74	1,769	481	11,720
3 `	Eastern Pengal State .	118	<b>●</b> 365	3,372	10,139	3,344	10,5.4		•••	381	3,612				•	381	3,612
4	Cost Indian	22,092	3,49,811	23,581	1,69,3.0	}	1,17,831			6:19	7,467		٠	104	4,629	793	12,496
6 (a)to(d	Great Indian Peninahla Madras	1,052	10,112	4,417	49,639	5,169	59,781	137 31	7,46; 277	161	0,543	10	415	7	281	252	9,220
B (a) & (	1.	598 151	1.00	1,229	8,648	500	0,045			1 1	3,475	340	3,218	32	363 6	587	7,333
	State.					1,350	9,522		•••			-	5			•••	11
	North Western State . Oudh and Robilkhand	6,266	29,931	6,457	60,401	12,713	90,332	209	3,375	214	5,553	21	563	29	937	473	10,466
	State. 3' 3" gauge.	1,017	4,050	223	975	1,270	5,031	-	•••	•••	•••		•••	2	30	2	30
2	Assum-Bengal	 12,644	19,172	7,315	.,125	19,0.9	78,597			20	234 50	 		 3	44	20 10	234 94
8	Bengal-Donars	1	U	81	38.	85	398			Ì					***		
4	Bhavnagar-G o u d a l Junagad-Porbandar.	62	283	11	57	73	330	9	36	2	12				1	11	4
s	Burms	,	116	ыl	1,390	Đυ	1,536	33	013	11	381	4	80	1	7	49	1,39
6	Deoghur													1			
7	Dibru-Sadiya								•••								
8 (0)	Hydershad-Godavari Valley,	66	719	174	1,371	240	2,000	4	76	3	37		1	В	118	11	23
8	Jodhpur-Bikaner .	372	1,910	1,400	6,827	1,772	8,737	18	62		18		9	3	31	21	110
6 (r)to(h	Mairns	69 3	444			59	411		•••	20	66		•••		•••	20	61
2 (6)2(0	1	7,088	61,008	2,000	15,710	9,945	78,716	186	9,141	17	900	 60	2,230	40	1,706	293	13,98
to (m	0.1	151	353	1,008	2,851	1,157	3,201	1	0,141	"			2,230				10,80
1	South Indian	435	2,383	8	103	413	2,486	" 1	28	10	176	13	159	. 21	159	45	62
3	Southern Mahratta .	279	2,214	277	2 007	829	4,271	1 10	2,693	211	1,924	1	8			352	4,62
3	Udaipur-Chitor	54	2-8	36	220	89	504						***	1	5	1	
s	Barneet-Bashbat Light			ė										*			
5	Barei Light			51	150	64	150	2	10				***			2	1
	Bukhtlarpore Behar Light.																
	Cutch	4	10			4	10			•			•••			•••	
	Kalka-Simia	1	12	2	i	3	52	2	28	4	63		•••			6	11
1 (a) 1 (d)													•••			*	
D (a)									•••		-			-			
a	Tarakeshwar-Magra			,	10	,	10	<u> </u>		2		<u></u> .			,	2	"
3	Light Tespore-Balipara Ligh																
*	2' 0" gauge.																
5	Darjeeling-Himalayan												***		<i></i>		
8	Howrah-Amta Light .						•••						•••	•••			
7	Howrah-Sheakhala Light						•••		•••	-				*		•••	
8	Jorhat								***			•••		<b></b>		**	
1	Total 1906 .	55,598	4,37,226	63,134	8,79,147	1 8,722	8,16,373	1,008	24,656	2,369	41,727	489	8,264	413	10,116	4,303	84,7
1	Toral 1905 .	49,274	3,77,816	50,833	3,79,043	100,097	7,57.469	1,174	28,978	2,732	46,029	190	8,687	362	11,620	4,448	95,2
	Тисанави .	6,314	59,410	2,311		H.625	59,874	<u></u>	***			299		60			
	DECERASE .	•••			536			141	4,323	363	4,301		· 493		1,404	155	10,45

DIX 17-continued.

the earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

						X	XVII.					ir		XX	VIII.	
						Bı	PICE+.									
(1 Betol	l) -uuts.	() Cards	2) moms.	(S Chil		1	4) ager.	1	5)	ì	6) <del>(</del>	То	tal.	Stone s	nd lime,	
Quantity.	Earnings.	Quantity.	Earniuge.	Quantity.	Earnings.	Quanty.	Earnings.	Quanlity.	Earnings.	Quantity.	Larnings.	Quantity.	Earnings.	Quantity.	Earaings.	-
Tons.	Ra,	Tons.	Rs.	Tons.	Rs.	Tons.	Re.	Tons.	Rs.	Tons.	Ra.	Tons.	Rs.	Tons.	Re,	1
7,081	59,759			10,773	1,20,240	•				7,115	52,257	21,972	2,31,256	79,789	2,24,150	
1,108	20,071	95	1,471	2,930	23,851	1,790	9,003	750	15,696	8,651	92,061	15,333	1,62,749	69,327	1,67,526	1
17,486	1,45,037	292	6,122	5,796	39,437	1,133	10,833	234	4,306	3,811	19,333	29,785	2,83,367	40,972	50,477	
8,724	1,74,973	590	14,131	9,051	1,61,845	1,470	14,0%5	1,626	48,005	11,319	1,63,221	32,810	5 46,210	1	14,09,014	ı
10,291	2,31,274	73	1,842	9,331	91,692	375	7,407	361	12,853	11,064	1,45,751	31,495	4,92,519	1.39,314	4,79,861	-
11,223	1,35,791	46	531	23,873	1,51,826	720	5,777	e,525	43,451	3,168	17,691	45,671	9,54,907	75,470	1,67,797	1
857	8,846	11	165	2,701	21,8:6	35	353	41	427	1,461	12,287	6,106	43,894	19,758	59,023	- 1
\$06	5,315	269	4,833	6,116	84,400	1,427	14,135	1,213	27,373	5,087	49,892	16,017	1,85,017	218 292	4,21,840	
1,669	23,958	31	306	1,672	15,207	<b>3</b> ນ່ສ	3,443	88	808	1,521	0,989	6,379	49,701	8+,758	1,43,611	- 1
							1.0	41								
1,931 2,462	22,627 20,476	 540	2,479	2,026 5,931	34,534	1,353	12,303	5 5/13	6,323	157 3,113	1,549	4,121 13.682	39,785	1	4-,612 67,803	- 3
498	2,232	38	368	12	30	74	103	31	163	59		714	8,145	1	2,313	١
479	2,360	5	40	541	2,742	10	bs	10	76	1,142	3,183	2,193	8,199	1	82,536	- 1
																1
5,975	67,955	6	225	6,890	97,209	095	10,114	33	781	168	2,537	17,075	1,00,518	1	2,63,695	1
***					"		***	***					•••	•••		1
4 57- <b>i</b>	6,040		10	629	0,847	29	263	11	···		4		10.001	9,033	4,995	ì
0/-1	0,020	Î	1	028	0,047		263	11	115	4:13	4,501	1,460	18,201	1,490	6,144	1
111	853	6	48	869	7,074	21	189	35	266	391	1,701	1,126	10,134	29,273	63,300	١
1,811	3,9~0	6	16	2,786	10,362	42	131	176	297	87	234	4,937	15,020	1,513	7,914	١.
8	36		1	69	247	4	11	1	3	62	264	143	004	8,023	6,058	١,
743	10,165	101	2,356	4,289	38,133	455	9,095	504	17,842	9,825	92,299	16,007	1,69,907	85,443	2,07,137	1
250	2,091	27	190	632	3,676	1"5	579	29	231	541	2,236	1,614	9,000	1 3	P)	1
14,404	72,185	546	4,925	8,525	85,633	564		784	6,545	454		25,277	1,74,353	1	1	1
10,970	88,490	168	2,761	18,612 35	19,006	290		108	3,582	0,801	61,761	37,3°9	2,59,139	1	1,01,409	ì
5	25		1 -	35	313	10	112	3	25	112	464	170	810	113	482	1
		.a				!				1					1	
518	1,425		1	10	84	8	21		24	182	467	727	1,975	205	497	
							"			*			1,0,0			l
		•	İ													1
2	7	***		44	122	13	39	1	3	49	134	109	30 6	4	10	
8	155	•••	•	12	239	213	1,293	1	16	7	. 123	240	1,830		12,841	1
22,	45	***		17	3 15		•••			7		31	63	i	869	
*	2			'						26	21	45	84		4	
	7						•••						" ,	15,902	5,897	1
									"				_ ′	62	184	1
	*					-							-	"	103	1
44	1,181	147	2,373	12	243	199	19	17	491	19	362	243	4,001	1,859	11,634	1
•••		•••	•••		•••	•••		***		•••		•••				1
**		•••		•••		***		***	•••	***		•••				
***			,,,				***	***		•••			***			
99,803	10,96,899	2,685	45,394	129,194	10,99,689	11,575	1.14,625	13,052	1,89,703	80,045	7,76,093	830,051	38,32,401	1,804,531	41,61,584	
101,506	11,32,847	2,401	46,949	119,637	11,47,915	11,952	1,37,947	12,266	1,72,040	79,693	7,98,541	3,27,514	31,43,243	1,075,102	36,62,039	ĺ
		274		2,547			· ···	1,386	17,663	352		2,410		223,360	5,19,845	l
1,702	85,948	111	1,055	911	40,037	877	23,322	101			18,552		1,10,841			4

...

APPEN

#### Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed

Nvu	efe,					XXIX	۲. ————						XX	X.		
<del>-</del>						Brea	t.			- 1			Tea	-		
			(1			(2) Unrefi	nod,				(1)		(2)			
		Raliway system, <i>wide</i> ≜ppend.z Se	Refined orysta ized ing sugar	includ-	(a) Buga	1	Gur. rab. H olasses a Sacharine	jaggary, ud other	Tota		Foreig	n.	Indle	1	Tot	al.
Main bead.	Sub-head.	,	Quant 17.	Zarnings.	Quantity.	Earnings.	Quantify.	Earnings.	Qaratity.	Earnings.	Quantity.	Ezenings.	Quentity.	Eartungs.	Quantity.	Earnings.
1			Tons	Re.	lons	Rs.	Tons	Ra.	White.	Rs.	Tons.	Ro.	Топи.	Rs.	Tons.	Re,
1		56"gauge. Bengal-Yappur	16,070	1,09,196			12,507	97,200	27,667	2,06,396			373	6,424	873	6,424
- 1	(0).	Bombay, Baroda and Central India.	44,762	5,44,169	384	2,0-5	30 220	3,01,221	75,368	9,47,478	381	5,143	302	5,048	603	10,191
	1	Eastern Pengal State	15,000	1,20,407	10,75	87,755	39,4 3	1,72 689	71,276	4,40,961			33,314	6,70,129	33,314	8,79,12
	[	East Indian	47,208	13,68,929	100,166	10,90,42	133,425	6,72,903	280,197	1,32,152		•	2,021	43,220	2,024	48,230
8	1	Great Indian Peninsula	79,200	12,70,018	12, <b>(]</b> [	03 267	96,102	8,09,500	184,173	31,73 713	139	2,180	1,031	24,408	1,170	26,678
6	(a) to (d)	Madras	6313	65,621	7,303	26, ,18	61,133	25,740	78,178	9,34,181	1	18	840	18,835	847	18,853
9	(a) & (b)	Nizam's Guarantord State .	3,997	31,007	367	2,401	5,001	35,715	D 165	69,523	17	241	82	1,461	99	1,702
•		North Western State	119,833	27,80,191	32,169	2,63,457	110,000	10,22,154	311,487	10,08,505	869	20,717	2,125	31,417	3,904	84
10		Oudh and Robilkhand State .	21,193	1,51,117	52,108	2,51,772	120,671	7,15,(8)	203,333	11,17,378	•••		2,352	13,004	2,352	13,004
11		3' 81" gauge	5.8	3 467				10 100	4.11.	21,712			90.000	2 7 4 019	40 550	*
13	•••	Benguland North-Western .	7,425	61,671	1 fe s 401	7,910 <b>2,84,3</b> 18	2,212 99, 3J	10 126	1,111	4,11,596		•••	20,178	760	29,778 66	3,54,818 700
13	***	Bengal-Dunara	705	3,010	231	894	97	4,615	1,993	8.517	· · ·			3 31,088		3,31,081
14	**	Bhavnagar-Gondal-Jun gad-Por-	10,230	46,611			3,611	11,628	13,751	59,272	1	10		616	84	626
	•••	oandur,														
15		Burms	186	1,657	6,245	57,360	15,110	1,22,619	20,170	1,41,860	1,081	21,033	74	1,198	1,155	22,230
16		Deoghar		3,124	•••	•••		***			•••	•••			•••	
17		Dibru-Sadiya	571	20,2.9	•••				671	3,922	•••	•••	9,79P	82,019	9,798	82,019
10	(c)	H; dorabad-G: davar: Valley  Jedhput-Bikaner	2,901	21 09 1	111	1,735	081	0,656	4,024	1,06,101	3	51	3	45 28	6	99
16		Madras	4,133 6.8	3,004	5,012	31 0 18	9,220	56,776	18,101	10,414		63	391	2,244	391	61
19	(e) to (k)	Morri	20.5	79'	824	2,603	1,455	1,434	919	2,289			2	10	301	3,244
3	(6)&(g)	Bajputana-Malwa	25,653	2,74 385	40,710	3,51,110	93,227	9,54,583	159,590	15,80,370	451	8,825	216	2,287	607	11,112
-	to (m)				,,,,,,		-5,55	1,,			-,-					1.,
20	(a) & (b)	Rohilkund and Kumson	2,718	6,053	7,550	20,042	27,145	1,04,573	37,413	1,35,568	•••	•••	193	1,774	195	1,774
21		South Indiau	16,779	74 311	6,569	23,472	36, 185	2,11,80	59,727	3,00,600	1	9	3,994	26,348	390,8	35,367
23	•••	Southe n Mahratta	16 229	(8,034	7,195	49,809	63,618	3,31,272	70,912	4,51,100	38	654	52	804	90	1,558
23	•••	Udaipur-Chitor	378	1,028	675	3,307	1,161	5,436	2,214	10,671	•••	4	en.	5	***	9
21		2'6" gauge. Barnet Burthat Light.				1		l	l				,			1
95	***	Baral Light	705	1.781	",	. ,	124	373	830	2,137			]	"	٠.,	· .
<b>2</b> 0	1	Bukhtiarpore-Behar Light		1,781	, *	*										
27		Cutch	251	742	710	2,104	1	5,249	2,704	8,135			2 1	4	1	
30		Kalla Simla	294	3,696	417	4,544	971	9,0(4	1,672	17,211	18	301	20	384	35	696
1	(4)	Mourbhanj	32	* 66			7	19	89	85	•••			1		1
1	(d)	Parlokimed: Light	141	88			13	6	156	94						
80	(c)	Powayan Light .			767	802			767	692						
33	ا ا	Tarakeshwar-Mogra Light .			126	131		132	278	263	•••					
28		Tospore-Balipara Light			3	31			3	21	***		4,356	30,700	4,856	30,700
		2' 0" gauge.			1					,,,,,,,		1		x		
85	***	Darjeeling-Himalayan	. 69	1,162	643	1 4,461	1	1,240	978	16,863	***	•	4,417	0 1,974	i	1
36		Howrah-Amta Light	"									-				-
34	"	Jorhat			**	"	::							::		-
40	-															
	[	TOTAL 1908	463,756		341,108	26,37,217	998,165	64,87,248	1,799,012	1,51,05,136	3,988	59,278	112,816	17,10,261	-	
	1	TOTAL 1905	327,511	88,82,023	806,753	18,23,607	880,011	57,85,468	1,822,807	1,14,91,093	8,079	68,779	99,320	14,49,800		1-
	i	Інсаналя Виданаля	136,314	-	35,347	8,18,610	104,144	6,51,785	275,706	36,14,045		497	13,988	9,75,384	19,892	2,75,00
				100			1			***		***	***	1	***	

#### DIX 17—continued.

## The earnings therefrom during the calendar year 1906.

over all railways in India and is therefore not the same as the total production.]

_					XXI.						xx	XII.				XXXII	ll-(cont	uo bevai:	follow	ing pag	(6).	<del>,</del> .	
				To	BACCO.						• Wo	ю.						Wood	<b>.</b> .				
	(l Ugms	)		Manuf	2) actured.		Tota	. l.		1)	(1	<b>2</b> )	Tot	al	•	1)			Manuf	(2) actured.			
	tur		Cig	a) are.	l	b) norte. -			Tin	nber, ught,	Manufa	ctured.			Ra	w.	Carpete rug	and	Piece-i Epr	opeau.	Piece-g Ind	oods,	
	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Qaantity.	Earoings.	Quantity.	Eamings.	Qasntity.	Earnings.	Quantity.	Eartings.	Quantity.	Earnings,	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Total Links
T	ons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tone.	Es.	Tons.	Rs.	Тода.	Ян,	Tons.	Re.	Tons.	Re.	Tons.	Bs.	Tone.	Re.	ŀ
1	9,010	87,032	***		888	13,397	9,929	1,00,479	76,703	3,33,115	2,745	20,124	70,447	3,63,239								***	ŀ
1	19,107	,69,657	218	2,058	370	4,671	19,090	1,06,397	43,603	1,96,675	<b>5,3</b> 90	49,652	53,993	2,40,327	6,459	1,45,685	143	3,254	202	4,087	204	508,a	
3	1,835	3,12,433			873	12,761	82,708	3,25,104	45,617	87 <b>,87</b> 5	3,606	20,149	49,243	1,05,028	1,690	32,620					20	394	
3	1,690	3,51,649	238	1,213	3,450	51,180	35,387	4,34,073	63,610	2,49,109	9,660	99,509	73,279	18,708	1,659	22,979	C33	19,203	498	7,668	325	9,141	ı
		1,51,809	1,028	33,284	326	9,327	14,091	1,94,5 (0	189,004	7,47,043	7,673	1,28,621		9,75,667	018	19,049	61	2,786	121	5,815	146	4,737	l
	9 275	31,416	784 124	12,180 2,273	2,668 23	25,28 <b>2</b> 379	28,225	1,23,470 31,967	217,210 23,030	6,14,001 81,214	5,894 491	33,576	223,101 23,521	6,77,580 85,668	2,250	20,168	115	1,613	- 1	0,654	373	4,817	
	2,375 8,847	31,310	85	2,080	2,861	56,378	2,522	3 51,397	63,902	2,32,956	16,022	1,425 1,18,770	84,924	3,51,726	292 23,965	2,951 5,91,693	207	1,613	23 503	354 7,169	102	3,340 3,707	l
	6,752	91,531	71	1,001	485	4,077	7,308	36,669	94,198	1,50,100	8,107	30,995	102,595	1,00,195	493	3,082	42	201	30	304	133	1,492	١,
1	1,704	13,610	8	170	74	1,914	1,796	15,603	1,551	9,613	<b>99</b> 0	7,197	3,550	17,010	1	27	a	98				9	,
,	10,100	2,67,839	8	115	373	3,719	39,641	2,61,702	31,080	1,00,503	5,303	37,679	39,385	1,39,381	173	1,372	16	174	39	156	238	2,527	,
	2,559	6,800			171	472	2,733	6,771	1,397	6,251	254	1,206	1,651	7,467				***	•••			•••	1
	2,241	11,593	11	54	228	1,580	2,483	13,312	12,211	54,738	1,087	6,137	13,328	60,895	600	5,738	,	9	1	3	15	70	l
	4,500	40,099	189	2,917	638	5,792	5,331	18,808	137,351	6,49,707	2,255	15,890	139,407	5,61,303	36	261	85	1,841	19	210	1	28	۱
			•••				•••		3,272	18 904			 8,272	16,396				""		•••	"		1
	526	8,733		 64	32	573	562	9,369	8,047	16,396 37,327	674	9,121	8,921	46,443	7	101	30	685	",	14	80	843	ľ
	.779	12,265	23	313	157	1,633	1,959	14,211	1,768	8,910	393	2,130	2,151	11,040	3,871	39,369	11	137	12	1.06	9	96	ŀ
	2,408	7,392	32	421	157	761	2,597	8,671	20,988	30,916	424	2,153	21,393	32,968	12	91	3	62	3	30	7	82	ĺ
	631	1,209	1	9	14	51	516	1,269	991	2,061	97	313	979	2,374	298	1,922		3			9	50	ŀ
	5,529	1,72,757	118	2,659	C51	9,171	16,294	1,81,597	20,3%	80,098	3,793	29,905	29,129	1,03,993	7,996	1,22,129	615	8,509	229	2414	475	11,419	ı
	2,195	10,062	31	808	205	1,717	2,431	12,294	29,516	94,093	1,220	6,343	30,745	1,01,325	311	1,884	15	123	4	923	22	174	l
	9,503 3,380	48,040 83,595	1,450 253	15,566	1,255	5,815 2,630	12,298	60,830 91,263	124,220 96,4/12	2,53,085	6,030	10,393 38,860	130,256	2,11,951	262 583	2,050	58	620	1 2	54	37	808	l
	413	1,901		3	4	37	417	2,001	36	167	5,658 22	226	58	393	98	7,004	1	1 5			2	16	
														1.000		"		•••			-	•••	l
	45	125						201	G56 	A07	187	442		1,379		5						•••	١
	11	31					11	31			428	1,223	428	1,273									
	218	2,706	10	231	45	831	273	8,771	897	19,070	. 355	3,517	1,232	14,193	•4	62	16	429	19	272	52	1,101	ŀ
	16	30	•••			13	20	49	223	597	12	45	235	642				•••				***	ı
					1				29 831	1,300	59	45	95 931	1,300			•"					***	١
	41	51			11	21	 55	75	22	40			23	41	3							***	I
	1	8	•••				1															•••	١
		0.5	,	1		1		7,100									_		-		ایر	<b>.</b>	١
	50	964	188	4,951	59	1,210	207	7,126	149	1,376	187	3,409	335	4,875	3	53	3	87		141	12	313	ł
													::										١
				,													,					•••	1
	15,073	21,54,626	4,877	47,215	18,207	2,45,104	266,217	24,67,005	327.79	3 41,84,017	88,144	7,13,110	1.415.59	5,48,96,73	61,822	10,20,286	8,050	49,164	2,319	40,050	4,125	82,546	1
		20,38,307	5,003	93,724		1,26,957	-			9 38,93,587			-	0 40,21,21		0,10,785	2,405	47,825		-	4,963	93,58	-1
	2,768	1,21,410			2,308	18,207	14,636	1,31,117	141,264	2,91,980	9,748	-	161,000		-	1,09,521	247	330	_				
	***	***	128	8,509		***						15,508					•••		1,100	87,320	e50	9,715	ij

# ' Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed

Main	N	lumpre.		<u> </u>	XXX	CIII.		XX	XIV.		
Main   Sale-head   Failurey system, wish Appendix 20,   Clark Services	•				Woon-c	oncluded.					
Formulation   Property   Proper	Main bead.	Sub-head.	Railway system, vids Appendiz 39.	Matulacture	d—concluded.	To	TAI.	All other merch	articles of andise.	GRAND	TOTAL,
			<u></u>	Quantity.	Earnings.	Quantity,		Quantily.	Earnings,	Quantity.	Earnings.
1				Tons.	Ra.	Tons.	Rs.	Tone	Re	/B	
2 (c. f. f. f. f. f. f. f. f. f. f. f. f. f.	_							l		1 ons.	Rs.
1		1	· · · · · · · · · · · · · · · · · · ·	1		l	ì	1	1	1	1,63,56,
Real Indian		& (n) & (o).		1 / 1		1			ì	2,067,021	1,27,44
Great Indian Fedinania		1				i		1		2,965,098	1,32,59,
6 (a) to (d) 8 (a) 4, (b) 8 (a) 4, (b) 9 (a) 5, (c) 9 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 10 (a) 5, (c) 11 (a) 5, (c) 11 (a) 5, (c) 12 (a) 5, (c) 12 (a) 5, (c) 13 (a) 5, (c) 14, (a) 5, (c) 14, (a) 5, (c) 14, (a) 5, (c) 14, (a) 5, (c) 15, (c) 16 (a) 5, (c) 17 (a) 5, (c) 18 (a) 5,		1				1	1	1	l .	1	5.31,47,
Social Column   Social Colum				_						4.003,574	4,10,00,
10   10   10   10   10   10   10   10				1 1		1	1		1	2,314,405	1,18,91,
Ostih and Robitkhand State				1						1	33,90,
11		i							ł	4,595,489	4,13,47,
11	••	"				,	0,431	210,265	14,35,015	1	07,84
12	11			26	461	. 33	595	17,086	97.0R1	470 494	10.05
13	12	l i	Bengal and North-Western	1	4	460	1				
14	13		Bengal-Doonra			***			1		
15	14		Bhavungar-Gondal-Junagad-Porbandar .	2	4	6111	5,524	9,1+5	1	t l	
16	15		Hurms	5	119	139	2,147	191,415		1	
17	16		Deoghur					14,724		1	
8 (a) Hjørrhad-Goderari Velley 5 124 1,708 3,081 45,101 233,827 18,38,   6 (r) to \( \) to \( \) Modres 73 557 07 817 7,104 43,109 100,916 3,15,   10 Modres 73 557 07 817 7,104 43,109 100,916 3,15,   11	17		Dibru-Sadiya					43,128	ł		
18	8	(0)	Hydernbad-Godavari Valley		6	124	1,708	3,983	45,191	1	
6 (r) to \(h) Madras	18		Jodhpur-Bikaner	328	4,038	4,231	43,408	18,009	90,355		
1	8	(e) to (h)	Mndras	73	552	97	817	7,104	45,199	106,416	
10   20   20   20   20   20   20   20	19		Morvi	1	7	308	1,591	1,2?4	3 701	25,681	51,
10   (a) & (4)	2		Rajputans-Malwa	153	3,0-93	9,3~8	1,52,863	218,714	12,63,378	2,318,022	
22   Nouthern Mairraita   773   7,684   1,805   15,207   83,800   3,03,644   1,181,645   70,165   66,625     1   101   650   602   6,655   21,640   66, 66, 675   20,655   21,640   66, 676     6,075   4,154   6,075   4,154   6,075   4,154   6,075   4,154   6,075   4,154   6,075   1,33, 720   1,33, 720     1,341   1,345	20	(a) & (b)			408	428	2,610	69,903	1,69,957	3#8,257	11,31,
Ulaipur-Chitor   1   101   656   624   8,055   21,610   66,	31			1 1			6, 125	130,092	7,02,078	1,502,039	69,02,
2 ° 0" gauge.  Baraset-Basirhat Light 4,154 6,075 4,154 6,075 1,33,  Bard Light	22			773	7,588	1,395	15,299	B3,900	3,03,541	1,181,945	70,16,
25 Barsl Light		•	2 6" gauge.		1	101	626	624	6,65 <u>1</u>	21,640	95,
Bukhtiaipore-Behar Light			,,					4,154	6,075	4,154	6,6
27 Cutch 2,3c6 6,609 10,075 33. 30 Kalka-Simla 2,3c6 6,609 10,075 33. 1 (c) Mourbhanj	1			ŧ i			27			54,677	1,93,
Kalku-Simla	28	***	•		•			28, 118	41,345	28,118	41,
1 (c) Mourbhauj	27	***							1		
1 (d) Parlakimedi Light	1					110					
20 (e) Pownyan Light	1		1								18,0
### Total 1905	1				- 1					1 1	4,1
33 Texpore-Balipara Light	1			1 1							46,
2' O' gauge.  Durjeeling-Himainyan				1							17,0
35 Durjecting-Himalayan				"		***		6,370	18,010	26,514	63,2
36   Howrsh-Amta Light	35	(A)			118	20	tno	4 910	40 010	'80 600	
37 Howrah-Sheak hala Light	- 1			1 1	- 1				0		
38 Jorhat 14,616 59,349 14,616 59,  Total 1906 . 5,744 90,803 66,659 12,87,159 3,034,078 1,93,67,396 44,015,607 36,78,98,4  Total 1905 . 5,023 87,780 65,446 12,17,928 3,144,087 1,81,30,498 40,738,491 24,43,06,7  INCREASE . 721 3,113 1,213 65,931 12,36,800 3,316,116 1,36,91,6											
Total 1906 . 5.744 90,803 66,659 12,87,159 3,034,078 1,93,67,396 45,015,607 36,78,98,4  Total 1905 . 5,023 87,780 65,446 12,17,928 3,144,087 1,81,30,498 40,738,491 24,42,06,7  INCREASE . 721 3,113 1,213 65,931 12,36,800 8,316,116 1,36,91,6	1			1 1							9,0 89,2
Total 1905 . 5,023 87,780 65,445 12,17,528 3,144,087 1,81,30,495 40,728,491 24,43,08,7  Increases . 721 3,113 1,213 85,831 12,38,800 3,316,116 1,36,91,6			Тотав 1900 .	5,744	90,898	66,659					36,78,98,6
			Тотак 1905 .	5,028	87,780	65,440	18,17,928	3,144,087	1,81,30,498	40,728,491	
724444			Інскильн .	721	3,113	1,213	65,931		12,36,800	8,316,116	1,36,01,8
											<del></del>

## DIX 17-concluded.

## the earnings therefrom during the calendar year 1906.

over all railways in India and is therefore not the same as the total production.]

					ANIMA	Ls.					Nowses.	
	(i Hor	1)	•	(2) :Llo.		3) 9, etc.		i) hants.	To	T&L.	Main bead.	Brwades.
Quar	utity.	Earnings.	Quantity,	Karnings.	Quantity.	Earnings.	Quantity.	Earnings,	Quantity.	Earnings.		
	ons.	Rs.	Tons.	RH.	Tons.	Rs.	Tons.	Rs.	Tone.	Rs.		
	178	8,809	8,301	36,800	9,613	87,626	l			}	_	
	220	8,004	10,899	2,16,470	17,759	3,45,353	25	1,778	12,144 58,908	85, 079 5,69,757	1 2	
	20	615	2,613	29,415	108	1,357			2,507	28,317	3	
	1,320	1,40,888	3,337	76,202	5,253	1,25,0+8		3,611	0,910	3,45,820	4	
	1,100	82,669	17,512	1,52,761	6,954	1,04,039			25, 7.6	3,00,19	6	
•			•••								C	
	2^7	5,763 53,763	43 4,205	663 66 179	54 427	780	•••		301	7,405	8	
	422	£2,769 23,£81	839	60 179 6.511	16	16,207 470			6,734 777	1,25,135 32,502	p 10	
	2	60	51	• 703	222	2,731	•		275	3,613	11	
4	135	4,729	4,600	62,539	69	805			4,501	68,133	12	
											13	• Escluding Ru. 5 49 494 in a
	16	191	81	775	10	112			107	1,081	14	* Excluding Rs. 5,42,484 in r peet of ferries and steam-bo which are included in t
	785	25,457	3,742	1,10,578	2, 157	63,850		•••	6,091	1,90,882	15	details.
	•	•••	85					***	85	 835	16 17	
•	62	1,616	22	718	 16	303			100	2,637	8	
	36	726	22	350	7	60			65	1,136	18	
			.,.						•••		6	
	10	136	4	76		•••			11	212	19	
	381	0,546	3,063	46,50)	7,236	84,563		***	10,687	1,40,718	2	
	7	127	1,595	296 8,845	1	19	•••		21.	442	20	•
	230	943 6,505	313	7,651	3,786 1,005	31,898 8,524	 27	 894	5,417 1,663	41,078 23,364	21 22	
	4	47	2	10					6	57	28	
	.										26	
. '	.									1	25	
•						***					26	
•	-										27 36	
•	1		•••			2			•••	2	1	
	.					•••				4	1	
			•••						•••		20	
*	-					•••					32	
•	•	•	•••			•••	•••	•••		•••	83	
	.			78 	 			1		76	35 36	
				••					•••		37	
						•••	***	•••	14.		38	
	7,169	3,42,197	60,970	8,11,215	49,072	8,23,640	52	6,308	1,17,293	10,84,358		b
. 1	10,044	3,90,407	44,193	6,38,871	44,509	7,48,328	33	3,430	98,777	17,48,791		
	-		10,777	1,72,644	4,584	75,817	20	2,676	19,506	1,07,027		
	1,866	63,210				. 1	·					

APPEN

#### Analysis of working of each railway \*

Note.—Railways not shown

		(IAUGE.				5′ 6″							
į		Numbor.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) L	o (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number.	Particulars.	1966.	Bongal- Nagpur	Bom- bay, Buroda and Central India	Eastern Bengal,	Fast Indian.	Gree Indi Peniu G.I.P.	an sula.	Madrus.	Nisam's Guaran- teed State.	North West- era.	Oudh and Bohil- khand,	Assam Benga
i	DESCRIPTION OF RAILWAY	•		•									
,	WORKED.		5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6"	5′ 6″	5′ 6″	5' 6'	5′ G″	5′ 6″	3′ 3¾
			1,698:32	504:03	407.95	2,32 📭 5			1,425-23	351.70			
2	Mileage worked		240	138	129	414	264	148	318	351-70	4,111·18 623	1.220-92	772·8 12
4	Total length of the following gradients :-					i '							1
Ī	(a) to and less Miles	i				5.90	19:31				88.62	0.19	10.1
	(b) 11 to 13		0 15	1:02		17 66	2 82	≻6 75 <b>)</b>	22.84		93 23	9:30	33.0
		<u></u> €	100.00				27.40						
	(r) 81 to 100	1	103 90 570-81	0·50 1/9 58	•••	45°86 209°49	61 90 550-16	11.23	58·97 294·72	79·19 110 99	137-10	6 41	25.7
	(d) $_{1}h_{1}$ to $_{200}$ ,		010 01	10 30		203 43	3.50 10	טט נוטנ	239113	110 99	137 96	19.15	97-4
١	(c) his to sin ,,		141 78	63:31	5.97	163:31	210.95	105-14	156-28	18 22	114.09	22.56	31.6
5	Steepest gradient worked-		0.17	1.00	0.00	14.00	5 99	0.10	0.00	0.5.	F. 00		
	(a) Longth Miles		0.15	1.02	. 200	14 26	3 39	2.10	0.60	2.52	5.60	0.13	8.5
	(b) Inclination		ų <sup>1</sup> s	100	100	ď	7,14	ds.	40	7 no	2'5	35	*:
	FINANCIAL RESULTS.  Percentage of netearnings (including steam-boat traffic) for each half-	Calendar year 1906 by half- years, 1-t half	3 16	4:45	1 42	4.91	1.61	2:52	2.24	3.47	2.56	2 80	0**
	year on capital outlay . Per cent. }	2ud "	2.16	3.01	3.77	4'11	2.36	1.80	1.45	2.96	2.71	2.50	ŏ:
7	Percentage of not carnings for each half-year on paid up capital	1.t half 2nd ,,	3·11 2·17	:::	:::	:::,	-:: 	2·57 1·86	2·54 1·46	2:97 2:55	:::		:::
	OUTLAY, EARNINGS AND EX- PENSES.												
8	(Exclusive of Steam-boat Service)  Capital outlay per mile open . Its.	1st half 2nd ,.	1,46,200 1,49,160	1,89,859 1,90,755	2,05,033 2,08,52 <b>0</b>	2,30,348 2,17,710	2,00,0° 8	1,10,15	1,38,727 1,39,811	1,30,369 1,30,487	1,41,733 1,44,006	1,18,834 1,19,458	1,56,7 1,59,2
9	Total earnings per mile open por week , {	1st half 2nd ,	318 271	591 458	428 662	701 658		481 379	502 275	250 241	321 317	273 231	1
10	Total working expenses per mile open per week , }	1st half 2nd ,	131 139	260 234	307 335	266 262		222 207	154 188	105 95	172 161	137 127	1
11	Total ournings per train-mile ,,	1st half 2nd .,	4°61 3°92	6.67 5.54	3 63 4:77	4 84 4 65		4·39 3·75	4.13		3.75 3.69	3.39	2.
12	Total working expenses per train-mile , , }	let half 2nd "	1 90 2:01	2·94 2·81	2·61 2·42	1.83 1.85		2·03 2·05	2·26 2·76		2 00	1.70 1.70	2.
13	Not combined from the sails	1st hali 2nd ,		8·73 2·71	1.02 2.35	3·02 2·80		2:26 1:70	2.17	2·81 2·73	1.75 1.82	1.69	0.
14	Cost per 1,000 gross ton miles moved (freight and dead weight)	1st half		G 83	7·71 7·04	3.84		5·51 5·91	6·48 8·32	4.33	5:60 5:19	4:84 4:94	11° 10°
15	Percentage of total working ex- penses on total carnings Per cent.	let hal	41·25 51· <b>3</b> 1	41.01 51.05	71·78 50·58	37·73 39·85		46•3 <b>6</b> 54•39	68.10 20.00		53:51 50:67	50·20 55 10	93.
16	Percentage of total working ex- penses on total carnings, exclud-	( lat hal	1 59.72	43.16	72.22	36:37		41-66 53-39	49·41 67·29				86. 83.
,	(Inclusive of Steam-bout Service).	1 .					1					1	
17	Percentage of total working expenses on total earnings (for details, see items 123-129)	1st hal 2nd ,,	42·13 52·45		71·78 50 58			46·26 54 69	50.99 68.40		53·52 50·68		93: 86:

DIX 18.
system during each half-year of 1906.

do not prepare these statistics.

10	1 14	ī	1 -	<del></del>	<del></del> -	8}"	1				<u> </u>	~	2′ 6″		GAUGE	
12 a) & (b)	Liboni	15 (a)	(b) & (c)	8 (c)	13 (a) to (c)	(g) to (m)	20 (a) & (b)	21 (a) to (f)	(a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.	
Bengal and North- West- ern.	nagar- Goudal- Juna- gad-Por- bandar	Barma.	Eastern Bengul.	Hydora- bad Go- davari Valley.	Jodh- pur- Bikauer.	Raj- putana- Malwa.	Rohil- kund and Ku- maon.	South Indian.	South- ern Mah- ratta,	Udeipur -Chitor.	Jubbul- pore- Gondia exten- sion.	Kalka- Simla.	Konshal- garh- Kohat- Thal and Nowshe- ra-Durgai.	Reipur- Dhum- tari.	Calendar year 1906	
								3	t .							
8′ 3}″	8′ 3∦″	8, 81,,	3′ 8≩″	3′ 3}″	3' 33"	3' 81"	8, 35,	8′33″	3′3≩″	3′ 3}″	2′ 6″	2' 6"	2'6"	2′ 6″		,
,621.76	455.45	1,840-15	881.82	391-13	833-22	2,079.89	340.36	1,855.79	1,723-42	68.72	241.77	59.44	131.98	56-69		
287	64	236	145	47	85	295	61	243	244	7	28	21	21	9		8
•••	1.83	64.52	0.37		•••	3.10		G-07	15 <sup>.</sup> 66			<b>640</b> 0	0.86	0.27		
•	0.58	81.83	0.64	•••	•••	0.23	6.41	14.61	75.82		81.21	2:38			"	
0.69	1.69	47.78	2.02	••• '	***	18.75	8.56	100.82	550·10	1.10	60.54	●9.94	43.55	•••		.
5-14	123.76	155.52	21.23	221.73	168:36	360.44	4.40	213.71	265 92	30.75	<b>38</b> ·07	8.40	36 24	18.60		li
4.61	64.74	107.78	15.13	13.95	61.24	173.72	6.83	108.26	98.45	6.98	18:39	•••	22.74	1.95		ļ
0.69	1.83	9.81	0.85	5-41	2-31	3.40	8.00	0.64	15.06	0.40	0.07	27.61	9.43	0.27		
, 18o	*0	g <sup>3</sup> r	110	136.5	ıło	ᆎ	<b>7</b> 5	ı Ja	10	149	नेड	s <sup>1</sup> s	14		"	} 5
														41	""	
												= 7			Colondar year 19:6 by half-	
3·61 2·74	3·40 2·16	2·84 1·41	2·98 4·14	3·51 1·80	6·67 3 61	5·32 3·82	3 99 2 95	2·95 2·87	2·21 1·20	4·34 2·19	1·25 0·68	0 93 0 81	-0·77 -0·29	¢ 2.91	yeors. 1st half	3 6
<u></u>				3·49 1·81	•••						1.20	1.00	4	1.25	2nd "	15 "
***		***		1 61	**		•••	•••			u-66		***	2 81 1 25	1st half 2nd ,	} 7
									- A						- <del>-</del> -	
77,498 79,098	49,860 49,963	98,706 99,878	92,880 88,901	67,182 67,810	25,616 25,663	74,295 75,092	52,707 55,395	78,879 79,374	79,156 79,063	30,759 30,811	50,941 52,361	291,623 267,210	65,311 65,219	24,F39 24,926	1st half	} 8
182 163	112 86	249 201	218 250	178 120	104 84	280 234	143 124	210 200	150 124	82 60	66 55	232 263	53 61	47 82	2nd "	} 9
69 75	47	186 143	133 113	86 72	38 48	123 120	60 76	110 110	81 84	30 34	40 42	119 177	71 67	20 20	lat half	} °
3·06 2·77	8.68 3.58	8·39 2·72	8·57 8·93	3·49 2·94	3.40 2.66	8·67 8·20	8.36	8·26 2·94	2·63 2·42	5·10 3·93	2·76 2·09	5·30 5·42	0·95 0·95	2.27	lat half	}11
1·16 1·28	1.67 1.90	1.82 1.82	2·18 1·78	1.68	1·25 1·68	1.64	1·41 1·85	1.84 1.61	1 43 1 64	1.88 2.23	1·70 1·57	2·71 3·65	1.27	0 96	3ud " 1st half	}12
1·90 1·49	2·31 1·78	1.54 0.78	1.39	1.81	2·15 1·28	2·05 1·56	1.16	1·42 1·33	1·20 0·78	3 21 1 70	1.06 0.52	2.59	-0.32 -0.00	0 96 1:31	2nd " let half	
4·83 5·48	8:76 10:19	8:36 8:80	11-17 8-54	8.08	5.64	6.50	6.74	9.29	7.29	8-12	8-40	81.00	21.87	0·58 9·75	2nd "	} 18
87·88 46·26	42:02 51:62	54·68 71·36	61.14	48.25	8·07 36·65	7·05	7·18 42·12	8·18 56·87	8·79 54·28	36.94	7 67	41·55 51·22	17.83	12.07	1	}14
	-a Vd	.4 50	45-26	60.84	57.09	51.56	61.21	54 72	67 68	56.73	75.19	67.42	109:38	62-16 42-34	1st half 2nd ,	}15
86.79 45-02	41·15 51·26	58·80 69·78	58·25	46-87	85:67	48.07	41.51	55-79	52.77	86:92	F4-R4	51-18	185.04	90.50		
- 12	01 20	08.19	44 06	58.44	85.87	50.06	61.07	84.0I	86.84	56.70	68-67	67:25	109.55	38·52 54·24	let half 2nd "	}16
	42.09	55-29	62.74	48-95	86 65											
89-79						44.01	39.80	56-87	24.58	36.94	61.83	51.22	127-25			

# Analysis of working of each railway

NOTE .- Railways not show

- 1		GAUGE.					5′ 6″		<b></b>	····		
		Number	1 (a)	2 6	3 (a)	4 (a) to (3)	5 (a) to ( / )	6 (a) to (d)	8 (n) & (b)	9 (4) to (y)	10 (a) & (b)	11 (a)
	Particulars.	Calendar year 1906 by half- years.	Bengal- Nagpur.	Boun- bay, Baroda and Central India,	Eastern Bengal.	East Indian.	Great Indiau Peninsula.	Madras,	Nizam's Guaran- teed State.	North West- ern.	Oudh	Assam Bengsi
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.			*							,	
18		. { lst half 2nd "	54,54 56,78	54,76 49,31	37,46 41,04	1,51,22 1,54,57	1,61,97 1,50,48	54.14 67,97	9,66 8,01	1,75,93 1,69,96	89,07 87,28	16,81 19,06
	Proportions, dividing expenditure in ratio of gross ton- mileage (frought and dead load)—	1										
19	Coaching in thousands of Rs.	{ that half	18,75 16,86	19,74 21,48	17,81 17,24	42,03 43,71	51.18 57,96	17.41 23,71	1,95 2,18	52,05 54,20	17,79 18,22	6,24
20	Goods in thousands of Rs.	let half 2nd "	40,79 89,91	35,02 27,83	19,65 23,80	1,12,19 1,10,86	1,10,81 92,52	86.73 44,23	7,11 5,58	1,23,83 1,15,67	21,28 19,05	10,88 12,89
	COACHING TRAFFIC.											
	Gross receipts and train-mileage (in thousands) —		P				,					0
1	Receipts from coaching traffic Rs.	{ let half Zud .,	42 35 38,27	29,59 37,87	25,65 25,76	1,30,63 1,20,38	97,97 92,∷8	41,17 38,40	6,03 5,29	1,03,19 1,08,91	42,11 36,15	8,7 8,2
2	Coaching train-miles run . No		3,171 1,264	1,129 1,167	920 979	3,782 3,745	3,608 0,847	1,058 1,213	159 173	4,080 4,420	1,590 1,594	29 82
3	Average coaching receipts per train-mile R	lst half 2nd ,,	3·61 3·03	3°51 8 20	2·79 2·63	3·45 <b>3</b> ·21	2:69 2:10	3·92 8·17	3.06 3.80	2·53 2·47	2·67 2·27	2·9 2·5
	Units and Unit-mileage,											
	Number of units carried one mile (in thousands)—						}					
34	1st class Unit-mile	a { lat bal 2nd ,,	1,555 1,509	2,160 1,754	1,030 1,244	5,105 4,902	8,060 9,261	2,860 2,351	354 ¥71	4,931 4,673	2,035 1,719	29: 30:
25	2nd ,, ,,	{ lst hal 2nd ,	3,575 4,710	13,620 11,774	2.674 3,482	11,821 14,532	81 627 <b>32,0</b> 9 <b>4</b>	8,810 11,080	2,271 2,125	12,409 15,608	5,628 5,742	48 53
26	3rd or intermediate class 1	{ lst half	1	15,929 15,652	14,314 18,143	53,243 59,806	61 812 61,342	2,928 2,572	4,561 5,145	48,368 58,640	23,808 24,505	847 4400
37	4th or lowest ,, ,,	{ lst half	280.597	239,073 220,632	149,782	844.981 764,729	533,387 481,584	262,830 217,574		675,929 683,753	247,871 207,276	49,38 <b>45</b> ,08
88	Total passenger unit-mileage	1st half		270,781 249,812	167.800	915,100 843,969	634,916 584,281	277,452 263,577	41,457 38,120	741,687	279,392 287,2±2	50,49 46,27
29	Other coaching traffic . Ton-mile	dias has	1	8,116 8,196	1,105	9,326 9,061	9.313 8,262	3,170 2,819	476 374	5,281 7,488	1,874 1,681	36 40
	Average sum received for carrying a unit one mile—											
30	lat class	a { lat half	15 08 18:27	10·11 10·22	13·71 12·56	14.66 14.80	10.05 10.76	12·16 12 44	14.99 15.28	11:48 11:68	11·71 12·00	16 4 16 2
31	2and ,,	{ let half	6.65 5.98	4·55 4·96	6·83 5·64	6.76 6.72	4·27 4·55	4·97 4·00	4·63 4·89	5·21 4·79	5.84 6.87	7·9 7·8
39	Srd or intermediate class,	1st half 2nd ,	8·27 8·18	8.00 8.00	2·97 2·61	8·25 8·00	2·07 2·97	4·50 4·60	2·50 2·50	8·02 8·02	8.08 8.03	4·0:
38	4th or lowest ,, ,,	let hali		2·94 8·28	2·41 2·50	2 24 2 21	2·16 2·16	2·24 2·23	1.69	2·26 2·26	2.47 2.44	2-81 3-81
84	Average for all classes , ,	let half		2·46 2·51	2·63 2·70	2·43 2·40	9·45 2·51	2 46 2:41	8-81 5-80	2·43 3·43	2:64 2:64	8.0
95	Other coaching traffic per ton-mile	1 let half	40.08	20.87	46.40	80.49	84 65 87 10	86 10	42·58 85·46	85·44 84·12	40-68	42.8

# DIX 18—continued.

## system during each half-year of 1906—contd.

do not prepare these statistics

					3/ a	<del></del>					L		2′ 6″		GAUGE.	1
12 (a) & (b)	14 (a) to (d)	15 (a)	8 (b) & (c)	8 (c)	13 (a) to (c)	(g) to(m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23(a)	1 (b)	30 (a)	9(h) & (i)	1 (a)	Number.	١.
Bengal and North- West- ern.	Bhav- nagar- Gondal- Juna- gad-Por- bandar,	Burma,	Enstern Bengul,	Hyder- abad- Goda- vari Valley.	Jodh- pur- Bikaner,	Raj- putana- Malwa.	Rohil- kund and Ku- maon.	South Indian,	South- orn Mah- ratta.	Udaipur -Chitor.	Jubbul- pore- Gondia exten- sion.	Kalka- Simla,	Khu-hal- garh- Kohat- Thal and Nowshera- Durgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years,	8
							•		•							
27,05 30,74	5,94 4,90	46,18 48,34	26.94 23,99	8,31 8,97	8,05 10,13	64,61 62,74	5,32 6,89	40,94 87,45	35,58 86,69	51 58	2,46 2,61	1,82 2,69	2,43 2,26	29 29	lat half 2nd "	19
11,43 14,17 15,62 16,58	2,62 2,99 2,72 1,91	16,86 18,58 £9,82 29,81	10,82 8,92 16,12 45,07	2,82 3,08 5,49 3,68	2,83 4,84 5,22 5,78	20,71 24,28 43,90 38,51	2.26 4,10 3,06 2,79	18,82 17,21 21,52 20,25	11,59 13,62 24,05 23,07	83 41 18 17	91 93 1,55 1,68	89 1,13 93 1,56	98° 1,01 1,44 1,25	8 9 21 20	lat half 2nd ,, let half 2nd ,,	} 19 } 20
32, <b>6</b> 7 31,42	5,28 6,56	38,3× 32,02	18 80 22 45	5,43 4,90	7,09	40 03 48,11	5,52 5,55	41,01 88,40	28,89 21,73	81 65	1,92 1,59	2.06 2,21	1,08 1,21	30 26	lst balf 2nd s	}21
1,363 1,362 2:59 2:81	2.79	1,001 1,028 3:93 3:13	638 697 2 94 3 32	187 187 2:89 2:63	267 302 2 66 2:51	1,800 1,990 2:73 2:41	173 268 3·19 2·67	1,165 1,229 3:52 3:13	995 995 2:89 2:18	17 87 4·73 2·44	50 59 3:64 2:67	85 80 5:96 7:21	76 91 1:42 1:84	2·76 2·10	let helf 2nd " let helf 2nd "	} 38 } 38
	100	1.44-		104	000	1,342	110	1011	014			100			•	
456 420 1,208	189	1,447 1,315 8,645	579 645 1,626	164 177 1,860	309 215 752	1,031	156 160 976	1,241 1,042 6,239	954 995 8,772	29 20 67	97 89 81	103 123 190	55 61 83	5 3 6	Jak half	24
1,924	1,2837	3,362	1,167 7,726	1,888	1,997	4,256	1,027 405	4,368	8,599	53	80 62	218	98 78	6	lat half 2nd n	358
5,598 283,125	1,4:8 41,267	227,394	114.806	41,924	9,261 52,768	10,255 384,376	471 88,418	 310,761	172,764	6,454	51 15,750	1,676	49 7,030	1,703	ist half	} 20 } 27
268,18	44,107	179,894 228,486 184,571	184,699 124,737 142,589	37,206 43,948 39,266	55,074 55,821 58,331	391,682 399,850	37,144 39,955 38,802	321,818 354,244 327,228	158,664	5,165 6,557	13,556 15,930	1,671 1,969 2,012	9,104 8,146	1,494 1,744 1,525	2nd	28
275,479 758 964	241	995 968	750 1,044	245 187	326 402	397,224 3,000 8,002	168	860 853	163,258 1,347 1,118	5,304 42 56	18,726 42 40	49 52	9,312 28 <b>27</b>	7 6	2nd " 1st half 2nd "	} 29
19:98		16:13	19.84	11:45	11.57	14-10	25.58	11 78	15:45	17:85	15.85	49.32	11.60	15:40	1st half	}30
12:99	5.65	15·29 8·04 7·78	18'82 6'88 7'57	11.79 4.55 8.05	15·14 6·25 6·50	18·88 6·47 6·58	27·87 7·80 8 66	11.69 4.33 5.66	15·39 5·86 5·94	17.93 8.97	15·52 8·00 7·81	49·82 27·48 27·48	11.28 5.81	7.93 7.40	2nd ,, 1st half	} 31
6:09 3:19 3:11	4:00		8:00		2·78 2·86	3.38	4·29 4·46	5.00		2 99 8 00	4:50 5:38	27.48	3.00 3.00	7 40 4:50 4:50	2nd ,, 1st half 2nd ,,	32
1.99	9.75	2.99	- 9:50 2 49	8.00	8.06 8.06	2.01	2·15 2·15	2.03 2.04	2.09	1.99 1.99	2.00	8.00	2·25 2·25	3.00	1st half 2nd	}28
2 0t	1	8·16 3·14	8.64	2·14 2·19	2·19	9 12 2 12	2·40. 1·45	3·10 2·13	2.84 2.25	2·14 2·13	2·07 2·08	12·90 13 47	2:36 2:85	3.06 3.08	1st half 2ud ,	}34
64:61 89:15	47-69	84·81 86·46	48-58	40.53 43.85	42-26 42-02	30 84 27 99	59-64 64-17	50.61 50.08	44-86 43-50	35.63 38.41	4715 4781	204.05	58·18 52·90	45.87 45.40	1st half 2nd ,,	}85

APPEN

## Analysis of working of each railway .

Norm.-Railways not shown

		GAUGE.					5′ 6″					
انها		Num- ber.	1 (a)	2 (a) to (f)	3 (a)	4(a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	(a) to (g)	30 (a) & (b)	11 (a)
Serial number.	Particulars.	Calendar dar year 1906 by half- years.	Bengal- Nagpur.	Bom- bay, Baroda	Eastern Bengal.	East Indian.	Great Indian Penin- sula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and	Assam- Bongal.
	COACHING TRAFFIC-contd.	•										
	Units and Unit-Mileage-concld.											. [
	Average number of units in a train-											
36	lat class	1st half 2vd ,,	1·33 1 19	1·91 1·50	1·12 1·27	•1·35 1·31	2·22 2·41	2·70 1·91	1·13 0·69	1·21 1·06	1:31 1:08	0·95
37	2nd ,, ,, {	1st half 2nd ,,	3·05 3·72	12:06 10:09	2 90 3 55	3 12 3 88	8:69 8:34	8:36 9:14	7·25 5·42	3·04 5·58	8·54 3·60	1.64 1.64
38	3rd or intermediate class ,, {	1st half 2nd	6·83 8·22	14 10 13·42	15:56 18:13	14·08 15·97	17 00 15 95	2·76 2·12	123-91	11.86 12.14	10.98 14.13	1·12 1·24
# 89	4th or lowest ,, ,, ,, {	1st half 2nd ,,	299·52 195·85	211.69 189.10	162·77 137 42	223 38 204 18	146·63 125·18	248·44 204·12	91.16	165·68 164·71	155·92 130 03	167·61 138·95
40	Total passenger units	half	250 73 20s:98	229.76 214 11	182:35 160:77	211·93 725·34	174·54 151·88	262 26 217:32	132:29 97:18	181·79 171·44	175·75 148·83	171·37 142·78
41	Other coaching traffic Tons {	1st hal 2nd ,,	1·50 1·87	2·76 2·74	1·20 1·43	2:47 2:42	2·57 2·15	3·00 2·32	1·52 · 0·95	1·29 1·68	1·18 1·05	1·22 1·26
	VEHICLES AND VEHICLE MILEAGE		ļ		-		\					1.5
	Number of ceaching vehicles hauled one mile (in thousands)—											
42	lat class Vehiclo-miles	1st had 2nd ,,	1.447 1.474	826 867	1,115 1,213	4,410 4,515	5,655 6,144	1,495 1,373	395 468	4,592 4,792	1,717 1,688	446 532
43	2nd , , , , , ,	1st bal 2nd ,	1,247 1,350	2,071 2,134	1,078 1,166	5,698 5,853	5.997 6,492	1,648 1,663	862 461	4,002 4,867	1,516 1,432	437 521
41	3rd or intermediate class ,,	1st hal 2nd	f 1,220 1,313	1,044	1,890 2,008	6,556 6,217	3,979 4,056	278 189	h r	5,331 5,597	2,544 2,605	282 217
45	4th or lowest ,	Jethal 2nd		9,653 9,663	7,005 7,352	37,350 36,497	23,127	9,741 10,053	1,570	32,416 36,160	9,710 9,230	3,358 3,496
46	Othor vehicles	1st hal	1	1,741 1,925	1.194	5,520 5,709	6.519	1,038 1,472	201 187	3,108 4,282	1,125	540 570
47	Brake-vans	1st hal 2nd "	2,157 2,421	1,435 1,545	1,068 1,097	6,521 6.117	6,891	2,279 2,713	352 437	6,655 6,628	2.409 2,419	359 405
48	Total ,	ist hal 2nd ,,	f 18,727 20,333	16,775 17,351	13,738 14,470	63,050 64,938		17,059 17,463	2,887 3,295	57,034 62,326	19.021 18,845	5,422 5,741
	Average number of vehicles in a coaching			-	-		-	-				
49	lat class . No.	1st bal 2nd ,,	1 1·24 1·17	0·73 0 74		1·17 1·21		1·41 1·13	1·24 1·19	1 13 1:08	1.08	1·51 1·64
50	2nd ,,	1st hal 2nd ,,	1·06 1·06	1:84 1:63		1°51 1°56	1·65 1·39	1·56 1·87	1·16 1·18	1·13 0·10	0.82 1.80	1·48 1·61
51	3rd or intermediate class ,,	1st hal 2nd ,,	1·04 1·04	0.92 1.04		1·47 1 66		0·24 0·16	](	1·31 1·27	1 60 1 63	0·96 0·67
52	4th or lowest ", ",	1st hal 2nd ,,	9 93 10:14	8:55 8:28		9·84 9·74		9·21 8·29	5:01	7·95 8·18	6·11 5·79	11·40 10·78
53	Other vohicles	let bal 2nd ,,		1·84 1·65		1·46 1·52		1.55 1.21	0.64 0.48	0.83 0.97	0·71 0·92	1·88 1·76
54	Brake-vaus ,,	let hal 2nd ,,	1·84 1·84	1·27 1·83	1·16 1·12	1·72 1·63		2·16 2·24	1·14 1·11	1·63 1·50	1·52 1·53	1·22 1·25
55	Total	1st hal 2nd ,,	15:98 16:09	14.85 14.67		16·67 17·34		16·13 14·40	9·21 8·41	13·98 14·10	11·97 11·82	18:40 17:71
	Average carpings per coaching vehicle per mile-				-	-	-	-				-
56	lat class . Pies {	1st hal 2nd ,,	f 16*22 13:58	26·44 20·68		16:97 15:42			13:42 8:83	12:33 11:89	14:22 19:24	10.78 9.40
57	2nd " "	let hal 2nd ,,	19:07 20:85	29·85 27·86		14·04 15·45		26·67 26·68	29·42 22·51	14.05 15.36	19·82 21·58	8:86 7:97
58	8rd or intermediate class ,	1st hal 2nd ,,	22·16 35·17	45·74 38·55	23·60 23·6)	31·13 28·81		51·02 61·41	50-71	27·86 28·90	28°34 26°14	4·71 7·25
. 59	4th or lowest ,,	1st hal 2nd ,,	57:41 45:53	55·49 52·02	59:28 46:23	53.64 46.25		91.85 90.26	1 42 31 1	47.06 42.76	63.08 54.79	49:30 37:21
60	Othor vehicles	let hal 2nd ,,	69:47 79:01	53·36 47·56	32·23 43·76	51·51 49 68	49·44 45·71	69·85 68·67	100·60 70·78	54-92 59-26	67·78 46·72	28-56 89-43
,					1,	1			1			

#### DIX 18 continued.

#### system during each half-year of 1906—contd.

do not prepare these statistics.

12 (a)	14 (a)		8 (b)	1	18 (a)	2	20	21 (a)	22 (a)	1			2' 6"		GAUGE.	-
& (b)	to (d)	15 (a)	and (c)	8 (c)	to (c)	(y)to (m)		to (%)	to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (*)	Number.	l
Bengal and North- West- ern.	Bhav- negar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.	Hydera- bad-Go- davari Valley.	Jodh- pur- Bikaner.	Raj- putana- Malwa.	Rohil- kund and Kum- aon.	South Indiau.	Sou- theru Muhrat- ta.	Udai- pur- Cihtor	Jubbul- pore- Gondia exton- sion.	Kalka- Simla	Khushal- garh-Ko- hat-Thal and Now- shera- Durgai.	Raipur- Dhamtar	Calendar year 1906 by half- years.	
											•					
0°36 0°31	1.00 1.04	1·44 1·28	0.91 - 0.83	0°58 0°58	1·16 0·7J	0 74 0 52	0:90 0:77	1'06 0'85	0.96 1.00	1·63 0·76	0·75 0·65	2·99 4 04	0·73 0·67	0·48 0·23	1st half	}
0°96 0°97	6·52 6·71	3·64 3·27	2·55 1·67	5·99 6·10	2·81 2·75	2·16 2·13	5 63 4 94	5:3 <b>6</b> 3:55	3·79 3·62	394 1.97	1.63 1.35	5·48 7·15	1.10	0·54 0·49	"	3
3·95 4·11	7:48 7:93		12·11 8·73	:::	7 48 7:49	5·69 5·13	2·34 2·27			0·40 2·45	1·26 0·86	<b>::•</b>	1.02 0.54	2:92 1:81	let half	į
224·21 196·87	217·96 203·63	223-13 175-02	179·98 193·13	135:08 120:61	197·59 182·45	213·51 190·80	221·84 178·75	297·67 261·94	173 64 159 41	377·90 193 03	317·92 227·96	48:42 54:85	104:38 100:42	158 25	2nd ,, lst half	<b>,</b>
229·48 202·26	232·96 219·31	228·21 179·57	195·55 204·45	111.60 127.32	209·04 193·40	223·10 198·67	230·71 186·78	304·09 266·34	178 39 164 03	383·92 198-22	821·56 180·82	26.80 26.80	107:23	122·09	2nd ,, 1st half	}
0·60 0·71	1·27 0·99	0.09	· 1:18	0.79 0.60	1·22 1·33	1.67 1.50	0 97 0 85	0 74 0 69	1 35 1·12	2·43 1·35	0.81	1.42	0.36	124 62 0:65	1st half	, }
								•		,		1.71	0.29	0.17	2nd "	ľ
2,214 2,237	314 310	1,528 1,556	930 854	331 831	350 351	2,420 2,501	307 <b>37</b> 1	1,326 1,445	1,423 1,433	22 28	67 76	36 42	35 42	6	1st half	2
1,907 1,967	414 430	1,907 1,911	769 799	858 363	350 848	2,310 2,431	259 328	1,413 1,589	1,407 1,498	29 22	66 76	37 41	35 41	6	1st half	2
2,274 2,212	300 341	·.	1,465 1,560	:::	438 448	1,112 1,214	3 168 158	***		6 28	39 45		50 43	) (	2nd "	<b>?</b> ,
20,117 20,661	2,450 2,451	15,051 15,630	7,145 7,634	1,682 1,609	3,525 3,746	24,994 27,095	2,352 2,679	16, <b>92</b> 6 17,420	11,577 11,229	332 266	1,249 1,398	152 154	478 635	138	2nd " 1st half	3,
441 440	127 131	1,069 936	928 888	154 147	317 367	1,703 1,830	58 146	2,080 2,018	1,424 1,197	<b>6</b> 8	49 81	) (	37 104	7	2nd ,	٠ ٢.
2,799 3,250	474	1,434 1,465	733 824	299 296	912 933	4,221 4,880	564 418	1,116 1,060	1,646 1,613	54 52	49 53	71 78	76 60	19	2nd ,, 1st helf	, }
29,752 30,776	4,079 4,110	20,984 21,498	11,970 12,559	2,824 2,746	5,872 6,103	36,760 39,951	3.708 4,100	23,891 28,562	17,477 16,970	449	1,518 1,729	299 315	711 925	176	2nd "	2,
														164	2nd ,,	•
1·75 1·64	1.66 1.70	1·53 1·51	1·46 1·22	1·07 1·07	1·24 1·16	1·34 1·25	1·77 1·78	1·14 1·18	1·48 1·44	1 30 1 03	1°34 1°29	1 04 1 37	0·46 0·47	0·59 0·53	lst half 2nd ,,	}
1·51 1·45	2·19 2·34	1·91 1·86	1·21 1·15	1·15 1·18	1·31 1·15	1·28 1·24	1 49 1 38	1·24 1·29	1.41	1.68 0.84	1·34 1·29	1.08	0 46 0 45	0·59 0·53		}:
1.80 1.62	1.58 1.87	::	2·29 2 24	:::	1·64 1·49	0.62 0.61	0.97 0.76	:::	· :::	0·37 1·05	0.78		0:66 0:47	) (	1 1	}:
15.93 15.17	12.94 13.41	15.03 15.21	11·20 10·95	5·42 5·22	13·20 12·41	13·88 13·55	13·59 12·89	14·53 14·18	11.64 11.28	19·46 9·96	25·20 25·50	4·39 5·07	6·29 7·00	10.12		}5
0.32 0.32	0·67 0·72	1.07 0.81	1.45 1.27	0·50 0·47	1·19 1·22	0.95 0.91	0·34 0·71	1·78 1·67	1·43 1·20	0·86 0 29	0.99	۱۰ را	0·49 1·15	0.09 0.56	1	}5
2·23 2·39	2·50 2·45	1·43 1·43	1·15 1·18	0.86 0.86	3·41 3·69	2:35 2:44	3·26 2·01	0.96	1.63	3·13 1·98	0.89	2.15	1.00	1.73	1 1	} 8
28·56 22·60	21·54 22·40	20·96 20·92	18·76 18·01	9·10 8·90	21:99 20:52	20·42 19·98	21·42 19·73	19·65 19·18	17·57 17·05	26·80 15·10	30·64 29 08	8:66 10:35	9,36 10 20	16 <sup>42</sup> 18 44	1st half 2nd "	}5
2·67 2·44	6·82 6·89	15:31 12:92	8·61 10·43	5·69 6·33	10·83 9·29	7·81 5·72	13:02 12:00	11·03 8·43	10·86 10·69	29·08 13·20	8:85	165.93	18.60	12 62	let half	} 5:
8.88 4.10	16:81 16:10	15·38 13·60	14·12 13·98	23·67 26·18	13·48 15·53	10·89 11·44	29·42 27·11	18·73 15·57	15.72	21·06 21·68	7·81 9·73	169 44	16.63	7:33	lat half	5
6·85 7·98	18.89	:::	1585 17.95		12·65 14·44	27·59 25 28	10.33 13.29		14-29	3.18	8·20 7·27		13.04	ا را	let half	8
26·07 28·86	46·32 41·74	44·44 34·13	40·17 43·45	49:83 46:28	30·81 30·24	30·97 28·30	35·13 29·77	41·49 37·75	31.14	7 01 38·79	6·19 25·23	115.85	87:34	38·05 (	2nd ,,	) }
76:24 81:15	90.88 90.88	82·42 87·71	84·41 57·92	64 84 55:77	48:40 46:05	54·84 45·90	171·37 77 81	20.92	29·48 42·24 41·36	38 69 238 77 151 06	40.00	113·53 134·48 137·16	32·26 39·26 13·45	42:92	*** "	} a
		. [							. ,	*			20 20			•

APPEN

# Analysis of working of each railway

Norm.—Railways not shown

		GAUGE.				5′	6"					
ن		Number	1 (a)	2 (a) to (f)	3 (a)	1 (a) to (d)	5 (a) to (f)	წ (a) to (d)	8 (a) & (b)	9 (a) to(g)	10 (a) & (b)	11 (a)
Serial number	Particulars.	Calen-	Bengal- Nugpur.	Bom- bay, Baroda and Central India.	Eastern Bengul.	East Indian,	Great Indian Peninsula,	Madras.	Nizam's Gasrau- toed State.	North West- ern.	Oudh and Rohil- kund,	Assam- Bengal.
,	COACHING TRAFFIC-contd. VEHICLES AND VEHICLE-MILEAGE-	(										,
	concid. Carrying capacity haulad one mile (excluding brakes) (in thousands)—				i 1							
61	1st class Scatz {	1st half 2nd ,,	13,043 12,929	20,578 21,217	23,553 25,744	64,100 67,210	77,723 85,297	14,572 13,988	4,965 5,938	82,585 85,873	38,880 37,609	5,218 6,143
62	2 ud , , {	lat half Zud "	17,207 18,523	69,053 70,229	26,188 28,451	123,544 127,421	160,682 175,708	28,541 28,466	7,991 10,232	96,302 130,371	34,4°3 32,417	5,099 6,067
63	8rd or intermediate class . " {	1st half 2nd ,.	40,967 42,286	43,944 50,420	86,318 91,259	247,182 273,885	220,538 226,806	10,216 7,472	85,941	186,976 199,721	88,674 90,940	6,392 4,151
64	4th or lowest class ,, {	1st haif . 2nd .,	617,361 668,275	526,499 521,784	395,326 416,261	1,942,311 3,014,669	1,175,214 1,207,637	571,048 589,838	95,600	1,714,313 1,913,151	545,284 537,458	118,075 1 <b>24,</b> 315
<b>6</b> 5	Other vehicles Tens {	1st half 2nd ,41s	8,402 7,205	8,704 9,471	15,179 13,619	54,609 46,303	33,549 34,200	9,787 8,378	1,243 1,482	43,896 58,516	25,570 27,696	1,656 1,732
	Percentage of freight upon capacity hauted—											
66	1st class Per cent. {	lst half 2nd ,,	11°92 11°66	10 50 8:27	4:37 4:83	7 93 7 29	10:87 10:86	19:63 16:80	7:12 4:57	5:97 5:41	5:36 4:57	5·60 5·02
67	2nd ,, ,, {	lst half 2nd ,,	20·78 25·43	19·72 16 77	10·21 12·24	9:57 11 10	19:68 18:27	31·19 38·92	28:42 20:76	12°99 15 35	16·35 17·71	9·51 8·76
€8	8rd or intermediate class ,. {	1st ha'f 2nd ,	19:54 21:60	36:25 31:04	16:58 19:24	21:51 21:64	28.01 27.05	28 60 34·13	45:18	25.87 26.86	26·85 24·75	5·17 9·61
69	4th or lowest class, $\{$	lst half 2nd "	45·45 37 05	45°11 42°28	37·89 32·32	*43.50 37.40	45:39 39:88	16:03 41:97	37.37	39·43 35·74	43·85 38·57	41·82 30·23
70	Other venicles	1st half 2nd	20 81 24 12	35 80 33 74	7:28 10:33	17·0; 19·57	27.85 24.15	32 39 33 65	98:33 25:21	12·03 12·71	7:33 6:07	21·74 23·51
	WEIGHT OF THAIN AND TON- MILEAGE. Gross ton-mileage of all conching											
71	trains (in thousands)— Froight	146 half 2nd .,	19,514 17,743	19.725 .8,490	11,175 10,972	61,673 60,186	48,393 44,331	20,109 18,950	3,023 2,714	50,224 53,397	18,834 16,099	3,411 3,207
72	Dend weight	1-t half 2ud ,,	281,540 311,233	262,298 279,676		1,049,17) 1,128,691		250,611 265,837	41 902 47,161	879,002 993,712	348,384 353,651	51,145 56,696
73	Total	lst half 2nd .,	304,058 3 1,976	259,0 % 298,166	2.31,050 244,521	1,153 844 1,185 873		270,720 2×4,787	44,925 49,875	929,256 1,047,100	367,218 369,150	54,552 59,903
74	Average weight of a coaching train-	lst half	16:66	17*46	12 15	17:10	13 30	19 01	9 65	12:31	11.85	11.26
75	Don't would	let half 2nd ,, let ha'f	212:44	15.85 2°8:45	238-94	16:07 257 95	241:94	15 63 236 89	133.71	12·08 215·47	10 10 219·15	9.80 173.57
76	m1	2nd Lat half	259-54	255 91	235 80 251 09	301:36	25331	255-90	120 85 143:36	227 78	231 00	174.9
'" 77	COST OF WORKING AND PROFITS -	2nd ,. 1st balf	1 17	1.75	1 94	317:42	1 41	1 65	1:7:27	1.28	2:31:57	2:0
78	ing train one mile	211 ,,	1.33	1:84	1.76	1.17	1.21	1.95	1.26	1.53	1.14	1.93
	ing vehicle with its load one mile	1-t half 2nd ,,	15:94 18:08	24.71 26:09	2678 2175	11.60 11.81	21.68 23.59	22:61 30:86	14.76 11.02	19 84 18 72	20:56 21:30	22·79 22·46
79	Average cost of hanling a coaching nut one mile - Per passenger unit . Pirs	lsf_balf	0.85	1 26	1:72	0.80	1:34	1.09	0.83	1.26	1.15	2:06
80		let half	8:37	11.82	1477 48:36	7:64	13.55	9.78	1·02 6·11	11.28	10:31	31.08
81	Average profit on working a	2nd ,.		13.99	97·45 0·85	8·27 2·34	17:32	13·55 2·27	7 48 2:!8	9.91	11.80	25.05
	coaching train one mile . Re. Average profit on working a coaching vehicle one mile—		1·70 0·28	1:73	0·87 -14:31	2 04	0.89	0.66	1.80	1.23	1.18	0.6; -12.0
82		let half 2nd ,, 1st half	3.13	-5·41 5·14	-10.83	3.61	- 7·37 0·84	- 9·57 4·06	-5·79	7:38 579	-9.03 -0.74	-13.00 -13.00
<b>83</b>		2nd ,,	2 77 6·22	1.27	- 7.92	3.61	1.10	-4:23 28:41	799	-3·36 -3·52	0·23 7·78	-14'4
81	3rd or intermediate class . "		7.09	21.03 12.46	-4·38 -1·15	19:53	20.98	80.55	85-95 27-69	10.18	4.84	-18·0 -15·2
85	4th or lowest class ,,	lst half 2nd ,,	41·47 27·45	30·74 25·93	25·30 21·43	42.04 84.44	29.06 20.20	27·95 23·96	) (	24.04	88-49	19.51
86	Other vehicles	lst half 2nd ,,	53·58 54·96	28.65	5·25 18·41	39·91 37·87	27·76 22·12	47·24 87·81	85-84 56-16	85.08 40.54	47·17 25·42	5·77 7·97

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

						3′ 3]″			_	<del></del>	T		2′ 6″		GAUGE.	1
12 (a) & (b)	14 (a) to (d)	15 (α)	3 (b) & (c)	8 (c)	18 (a) to (r)		20 (a) & (b)	21 (a) to (f)	22 (a)to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number	] .
Bengal and North- West- ern.	Bhav- nagar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.	Hyder- abad- Goda- vari Valley.	Jodh- pur- Bika- nor.	Rajpu- tana- Malwa.	Rohil- kund and Ku- maon.	South Indian.	South- ern Mah- ratta.	Udai- pur- Chitor.	Jubbul- poro- Goudia exten- sion.	Kalka- Sımla.		Raipur- Dhamtari	Calendar year 1906 by half- years.	
,											€5				,	
20,269 21,601	3,242 2,410	15,255 15,809	10,556 9,497	6,202 6,110	3,451 2,809	28.623 25,381	4,741 8,392	11,589 14,387	11,601 11,615	269 297	166 230	470 476	433 581	39 39	Jat balf 2nd "	}61
28,151 29,425	5,640 4,856	31,663 32,566	9,271 9,607	8.101 8,173	4,199 2,783	27,722 29,178	3,759 7,861	16,991 17,:63	17,486 18,650	345 262	199 191	637 563	433 566	38 39	Ist half 2ud ,	<b>}</b> 62
49,447 50,653	5,275 5,564		27,681 20,663		11,269 11,497	27,854 30,582	3,780 6,598		· •••	153 679	133 128		1,418 1,217	) (	1st half 2nd ,,	}63
602,082 605,955	74,206 70,871	4:0,747 464,800	210,408 229,078	89,179 84,716	111,294 117,893	818,284 868,551	93,927 169,833	555,010 570,891	370,790 362,730	9,752 7,727	31,139 34,958	3,817 3,707	11,468 15,306	8,896	ist half	64
1,294 1,593	494 510	3,418 2,558	5.108 4,669	715 652	3,874 4,416	8,902 8,509	294 5,190	5,081 5,253	3,947 8,402	25 32	. 149	298 313	111 312	11 10	lst half 2nd "	}65
2·25 1·94	5:84 7:87	9·49 8 32	5·49 6·79	2·65 2 90	8·96 7·67	5:68 4:06	3·60 1 90	10.71 7.24	8 23 8 57	10:66 6:87	22:33 1 <b>6</b> :76	22·00 26·23	12·76 10·47	13·65 7·84	lst half 2nd "	}66
4·29 4·50	21:88 25:26	11 51 10 32	17 <sup>-</sup> 54 12 <sup>-</sup> 15	22:96 23:04	17-91 29 84	1 4 (2 14·59	25 9 <b>6</b> 13 01	36·72 24·87	21·57 19 30	19:54 20:12	40 50 41 81	29·78 36·67	19 <sup>-</sup> 29 17 <sup>-</sup> 28	15 48 15:17	1st half 2nd ,	}67
10.08 11.05	26.62 26.03		27:91 . 29:45		17 72 19:66	36 79 33-53	10 71 7:14		 	4·43 9·68	47·1% 40·34	·	5-36 <sup>1</sup> 3 95 .	39:94	1st half ind .,	}68
47:03 44:25	55·61 52 £0	49·56 28 74	54·57 55 80	46°85 43°92	47:41 46:72	46 97 42 96	40 <sup>.</sup> 90 21 87	62·18 56·37	16·59 43·74	66.18 66.81	50 58 38 78	43·92 45·07	69·15 59·48	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	lst half 2nd ,,	}69
58·24 60·55	48 78 35 59	28:87 37:83	14.67 22.36	34·19 28·62	9 10	38 71 31:57	57·07 , 3·41	17:0° 16:23	34 13 32·70	167·56 113·02	48:48 27:03	16:48 16:64	21 88 8·50	63 05 55 83	1st balf 2nd ,,	}70
18,182 17,556	2,020 2,618	14,835 12,164	8,237 9,6 <b>4</b> 3	2,9 <b>2</b> 5 2,571	3,702 3,930	27,119 26,961	2,591 2,532	22,289 20,615	12,110 11,020	408 356	1,000 867	175 182	520 529	112 97	lsthalf 2nd .	<u>}</u> 71
218,403 241,165	27,026 26,787	186,842 19×,300	88,574 94,696	31,977 31,316	46,312 49,876	286,896 316,931	31,010 <b>51</b> ,641	180,292 180,643	146.0; 5 143,963	3,594 3,330	9.781 11,200	2,687 2,550	3,977 5,069	6 <b>75</b> 665	let half 2nd "	} 72
236,585 258,701	29,946 29,855	201,677 210,462	96,811 104,344	34,902 34,487	50,0 <b>94</b> 5 <b>3,</b> 806	314.015 343,895	33,001 57,173	202.581 210,258	1.8,165 154,988	4,632 3,686	10,781 12,157	2,862 2,732	4,497 5,658	767 762	1st balf 2nd ,,	} 73
11·40 12·88	15·42 11·33	14 82 11 83	12·91 13·84	9:42 8:34	13.87 13.02	13·89 13·49	14:96 12:19	19·13 16·78	12·17 11·07	25:61 13:31	20:20 14:58	5:0d 5:98	6·85 6·10	10:42 7:96	1st half 2nd .,	}74
172·96 191·75	142·75 146·33	186 62 192 92	138:86 135:78	103·63 103·48	173·73 165 23	148°09 158°51	179.06 262 95	154:77 154:36	146:80 144 64	210°47 124 43	197:43 189:86	77:62 83 70	52:04 55 91	62:75 <b>54</b> :35	1st half 2nd .,	}75
187·36 204·63	158·17 160·66	201.44 204.75	151.77 149.62	112:45 111:82	187:60 178:25	161:97 172:00	191·02 275·14	173·90 171·14	118 97 155:71	236·68 137·74	217:63 204:44	82.68 89.68	59 19 62:11	73·17 62·31	1st half 2nd ,,	}76
0.b1 101	1:39 1:64	1.68 1.80	1.69 1.28	1:51 1:65	1:06 1:44	1·15 1·21	1 31 1 97	1.62 1.40	1·16 1·37	1·91 1·52	1·83 1·57	2·56 3·73	1·30	0·71 0 75	lst half 2nd ,,	}77
8 14 9 68		16·57 17·76	18:48 14:58	21·46 24·18	10.91 15.85	12 22 10:27	13:52 21:30	16.60 14.68	13:98 17:03	15:89 22: <b>4</b> 0	11:83 10:68	56:85 69:08	29·73 22·39	9:31 12:30	lat half 2nd .,	}78
0·7·1 0·07		1·34 1·84	1:51 1:05	1·16 1·42	0·91 1·33	0:93 1:10	1.06 1.54	0:93 - 0:92	1·13 1·47	0.98 1.42	t 05 1 25	6·53 8·08	2·17 1 83	0·80 1·10	ist half 2nd ,,	}79
5·09 4·85		16·79 16·44	25°21 20°33	12:95 18:06	10·85 14·92	7:90 9:00	5:10 19:52	37:61 33:58	15:28 19:17	4 05 7 10	13°27 16 89	85°04 106°15	44·72 88·23	11 45 16:76	tet bulf 2nd ,.	}80
1.68		2·25 1·32	1·25 1·94	1.88 0.98	1.60 1.67	1·57 1·20	1.88 0.70	1.81 1.43	1 23 0 81	2·82 0·92	1·85 1·10	3·40 8·51	0·13 0·23	2:05 1:35	1st half 2nd ,	<b>}</b> 81
-6·47 -7·44		-1.26 -4.84	-9·87 -4·15	-1577 -17:85	-0·11 -6·50	-4·41 -7·55	-0.80 -9.89	-5.57 -6.25	-3.62 -6.34	7·19 —9·20	-2°98 -2°87	108:18 100:36	-11·13 - 5·76	3:31 5:85	1st balf 2nd .,	}82
-4·26 -5·78		-1·19 -4·16	-4·36 -0·60	2·21 1·95	2·49 -0·83	-1·33 -1·83	15:60 5:72	2·13 0·89	1.74 -2.74	5°17 - 0°72	- 2·10 -2·48	106°26 102°00	15·88 8·65	-1:08 -5 56	lat half 2nd "	}83
-1:29 -1:29		::	-2.63 8.87	:::	1.71 -1.41	15·37 12·01	-3·49 -8·10	:::		-1371 -14·36	-4:56 -4:49		- 25·06 18·95	28.74	1st balf 2nd ,	}84
15.98	26.07	27·87 16·87	21.69 28.87	28:37 22:05	19·87 14·39	18·75 15·03	21°31 8°88	24·89 22·07	17:16 12:45	22·90 16·29	18.40 8.72	59:00 44:50	7·61 9·87	24.70	lat half 2nd ,,	}83
68·10		15.85 19.95	15.98 43.34	42.88 31.59	32·46 30 20	49·12 32·63	157·55 56·42	4·32 6·16	28·26 24 88	222-88 128-66	28·17 12·88	77·63 68·08	9·53 8·94	39·61 25·72	1st half 2nd ,,	}86

#### APPEN

## Analysis of working of each railway

Norm.—Railways not shown

		GATOE.					5	6"				ı
i i	_	Num- ber.	1 (a)	2 (a) to (f)	3 (a)	(a) to (d)	(a) to (f)	6 (a) to (d)	(a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number	Particulars.	Calendar year 1906 by half- years.	Bengal- Nagpur.	Bom.	Eastern Bengal.	East Indian.	Great Indian Poninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and Bohil- kund.	Assam Bengal
	COACHING TRAFFIC—concld. COST OF WORKING AND PROFITS— concld. Average profit on working a coaching						*					*
87	unit one mile - Per passenger unit Pies {	1st half 2nd ,	1.67 1.36	1.20	0·93 0·93	1:63	1 11 0.85	1·37 0·83	1·47 1·29	1·16 1·15	1·49 1·27	0·98
88	Other traffic per ton, {	1st half	31·71 30 76	18:05 14:66	-1:89 11:76	22·85 23·03	20°80 19°78	26:32 22:30	36·12 27·98	23·54 24·21	30·37	11·7. 13·9
	GOODS TRAFFIC. GROSS RECEIPTS AND TRAIN MILEAGE— (In thousands.)											
89	Receipts from goods traffic . Rs {	lst half 2nd .,	94,07 77,17	86,37 59,90	25,94 57,65	2,86,86 2,75,19	2,56,89 1,86,09	66,41 61,20	18,84 15,98	2,29,81 2,28,55	41,24 36,02	8,5 13,8
90	Goods train-miles ruu No. {	1st half 2nd ,,	1,865 1,781	783 616	60A 816	4,947 4,871	4,527 3,690	1,439 1,355	410 331	4,954 4,884	1,052 947	46- 51
91	Average goods receipts per train-mile	1st half 2nd .,	5·01 4·33	11.03 9.72	4·28 7·06	5:80 5:65	5·68 5·04	4·62 4·52	4.60 4.83	4·64 4·68	3.92	1·8 2·7
92	Units and unit-Mileage.  (In thousands.)  Tons of goods carried one Ton- mile	Ist half	368,659 <b>310,950</b>	233 263 169,264	103,694 141,073	1,356,224 1,318,328		201,870 183,271	61,676 52,158	982,398 984,483	164,297 144,723	35,09 52,48
93	Average sum received for carrying a ton one mile . Pies	1st hold 2nd	4·90 4·77	7 11 6:77	1·80 7·85	4·06 4·01	6:46 6:29	6:32 6:41	5.86 5.88	4·49 4·46	4.82 4.78	4·6 5·0
94	Average number of tons in a train	1st half 2nd .,	197 65 171 57	298·00 275 74	171·11 172·78	274 13 270:61	168:77 153:69	140-29	119·12 113·93	198·32 201·59	156·22 152·85	75.5 102.3
	VEHICLES AND VEHICLE-MILEAGE -								i			
	Number of goods vehicles hauled one mile— (In thousands.)											
95	Loaded Vehicle-miles {	1st half 2nd ,,	34,589 29,813	26,381 20,005	10,617 13,048	121,180 120,506	85,298 68,729	25,512 23,799	5,576 4,432	91,597 92,021	22,345 18,346	5,09 8,13
96	Empty ,, {	1st half 2nd	16,219 14,930	6,175 <b>4,</b> 825	3,077 4,149	62.033 59,288	2 <b>5,4</b> 95 19,173	9,359 9,070	3,298 2,555	26,510 25,764	6,050 5,607	2,20 2,02
97	Brake-vans " {	1st half 2nd ,	3,268 2,911	714 511	607 784	5,658 5,809	9,315 7,040	2,539 2,383	761 567	4,985 4,859	950 814	49 56
98	Total ,, Average number of vohicles in a goods train—	1st half 2nd ,,	51,076 47,694	33,270 25,591	14,301 18,281	188,271 185,053	120,108 94,942	37,410 35,152	9.635 7,554	123,092 122,644	29,345 21,767	8,68 10,72
99	Freight vohicles No. {	let half 2nd ,,	27·24 25·12	41·59 40·23	22 60 21 43	37:04 86:90	24·47 23·82	21·24 24·26	17·14 15·26	23·84 24·12	27.00 25.30	17·6 19·8
100	Brake-vans ,, {	1st half 2nd ,.	1·75 1 65	0.01 0.01	1.00 0.96	1.03	2·06 1·91	1·76 1·69	1:47 1:24	1.00 1.01	0.86 0.80	1.1
101	Total ,, {	1st half 2nd "	28:99 26:77	42 50 41·19	23 60 22:39	38°06 37·99	26·53 25·73	26.00 25.95	18·61 18·50	24·85 25·12	27:90 26:16	18·7 20·9
102	Average earnings per goods vehicle per mile (excluding brakes)	1st half 2nd ,,	35:55 33:12	50 94 46 31	36:37 60 51	30 06 29 40	44·52 40·65	36·56 35·75	40·76 43·91	37·36 37·26	27·89 28·88	20·0 26·1
108	Carrying capacity hauled one mile (excluding brakes) . Tons	1st half 2nd ,	816,535 728 <b>,63</b> 4	445,527 341,076	184,159 284,874	2,682,437 2,689,275	1,592,679 1,269,302	499,034 472,153	134,193 108,080	1,812,853 1,859,875	361,747 311,366	77,82 95,92
104	Percentage of freight upon Per scapacity hauled cent. }	1st half 2nd "	}	52 36 19 83	56 81 60 06	50·56 49·02	47 97 44 74	40·45 38·82	45.96 48.26	54·19 52·93	45'42 46'48	45·1 54·7
105	Average load of a goods vehi- cle (including both loaded and empty) per mile Tons	1st half 2nd "	7 <sup>.</sup> 26 6 94	7·17 6·85	7·57 8·06	7·40 7·83	6·90 6·46	5·79 5·58	6·95 7·47	6'82 8'36	5:79 6:04	4·2 5·1
106	Average load of a loaded goods vehicle per mile . ,,	1st half 2nd ,.		8:84 8:50	9·77 10·81	11·19 10·94	8·96 8·26	7·91 7·70	11·06 11·77	10·73 10·70	7·35 7·89	5·8 6·4
107	WEIGHT OF TRAIN AND TON- MILEAGE— Gross ton-mileage of all goods trains— (In thousands.) Freight Tons	1st half	368,659	233,263	103.694	1,856,224	763,988	201,870	61,676	982,398		35,00
108		let half	310,950 533,083	279,494	151,281	1,318,328	1,246,954	183,271 869,852	102,688	984,488 1,228,285	144,723 275,065	52,48 59.68
*			474,796			1,696,745		\$48,443		1,246,883		70,58
109	Total ,, {					3,090,200 3,015,068	2,010,987 1,564,955	571,922 581,714	184,864 138,646	2,210,633 2,230,866	459,362 (885,919	93,78 1 <b>28,02</b>

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

					3′ 8‡″				·			2	′ 6″		GAUGE.	1
]:2 (a) & (b)	14 (a) to (d)	15 (a)	(b) & (c)	8 (c)	18 (a) to (c)	(g) to (m)	20 (a) & (b)	(a) to (f	23 (a) to (j	23 (a)	1 (1)	30 (a)	9( h) & (i)	1 (+)	Number.	
Bongal and North West orn.	Blav- uagar- Gondal- Juna- ad-Por- bandar.	Burns.	Eastern Bengal	Hyder- abad- Godi- vari Valley,	Jodh-	Ruj- putava- Mulwa.	Rohil- kund and Ku- maon,	South Indian.	South-	_	Jubbul- pora- Condia extension.	Kalka- Simla,	Khushal- garh- Kobat- Thal and Nowshera Unrgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years,	1 2
•											•				l	
1:31	1.81	1 22	1.13	0.84	1.58	1:19	131	1.17	1.11	1.51	1.02	6 37	0.10	0.00		
1·08	1.24 89.08	18 03	1.61	0 77 27 58	0:87 31:41	1·02 23·94	0 51 53 91	1.20	0 78 29 : 8	3 71 31 57	0 83 33 88	5 39 119 61	0·19 0·52	2:08 1:96	"	}87
84 133	35 6	20 02	28-91	25.79	27.10	18-69	11 65	16 50	25 33	26 31	30 42	99°64	-35·33 -35·33	33:92 28:64	1st buif 2nd .,	88
41,81 36,47	5,76 3,25	46,10 36,37	25,53 81,27	12 27 6,90	14,94 10,18	1,00,32 75,39	7,09 5,13	31,61 31,06	40,17	60	2.14	1,47	72	38	1:t haif	
1,228 1,185	114 92	1,554 1,594	617 683	352 229	397 335	2 328 1,953	2,19 1,73	1,103	32,95 1.516	85 11	1,57 98	1,81	<b>↑</b> 5	21 20	2ud "	} 89 3
3·40 3·21	3 99 3 52	2·97 2·37	4 16 4:48	8 7a 3 03	3 77 3 04	4.31	3.19	1,171 2.87	1,308 2:73	5 49	109 9-19	4 t 1.21	130 0:02	18 1*4	und ,	}90
3 -1			9.10			3.86	2.97	2.65	3.27	4.9	1.72	1 08	0 66	1.12	2ud ,,	}91
149,127 128,658	11.719 6 959	1 9,413 1,2,033	55,756 27,326	26,065 15,010		- 09,618 254,291	19,784 17,415	84,550 83,978	132,010 101,048	693 474	5 669 7,152	666 1,014	1,604 1,825	758 602	1st half 2nd "	}92
5 38 5 66	9 43 8 95	6 °4 5 72	8 90 7 76	ยี่ 0 เ 8 ะ 1	6 71 6 85	6°22 5 69	6·80 5·65	7 01 6 70	6 18 6 22	16 48 15:27	7:15 5:03	42 21 84 23	8 61 8 97	9 67 6:71	1st half 2nd	}98
191 43 103 93	81 25 75 47	83°26 79 54	89 24 113 · · 6	38.00	167 79 85:14	102.56 130.10	99°26 100°94	78 41 75 · · ·	9181 7770	63 93 54 06	57 90 65 62	2713 12 86	13 F6 14 05	38 51 32 59	lst half	}94
				•											-	,
25 286 22,327	2,778 1,738	25,704 24,606	12,930 12,959	4 0 <sup>7</sup> 5 2,787	6,38 <b>4</b> 5,538	16,048 45,712	3,112 2,417	17,371 17,841	26,351 21 279	$\frac{176}{128}$	1,545 1,574	183 250	705 716	202 129	ist helf 2nd	} 95
9,701 11,148	1,292 726	10,091 9,735	2 2°4 2,215	1,858	2,81 <b>8</b> 2,491	18,959 15,018	1.750 1,219	5 697 6,831	8,8-1 6,537	191 C3	543 835	104 50	266 274	107	1st half 2nd ,	}96
1,661 1,591	127 48	2,92 <b>4</b> 2,23 <b>4</b>	621 7.5	6°1 4-4	106 90	2,414 1,592	66 261	1.3::0 1,578	1 932 1.721		9 <b>7</b> 1e6		183 144	23 23	1st half 2nd ,	} 97
86,648 35,066	4.197 2,513	38,622 36,575	15.835 15,692	6,611 4.#37	9,°03 8.119	77.4:0 62 662	4 957 3.897	24,358 26,250	17,164 29,749	2·0 187	2 1·5 2,518	2×7 3c9	1.174	334	1st half 2nd ,	}#8
28·49 20· <b>4</b> 9	28-22 26-72	27 03 22 39	24.66	12·09 9·76	23-18	50-21	22 22	20.91	22.61	25 74	21 33	8:08	8 87	15:74	1st half	·
1.85 1.40	0 83 0 52	1·43 1·46	1 01	1 40	0 27	31·11 1·05	21 07 0:39	21°(6 1°20	21 26	21:37	22 13 6:99	G-96 	7/69 1/78	1.15	2nd ,,	}99
29:44	29:10	21 16	1 05	13 49	23 45	83 25	1.2	1:05	1 32		0 97		1.11	1 23	2nd "	£100
30.50	27.24	23:84	2:27	10 98	24-92	32.08	22·61 22·59	22:11	23 56 22:58	25 74	12 32 33 10	6 16	9 45 8 73	16 89 12 ::4	lat half 2nd	}101
22 94 20 92	27 16 25 29	24·73 20·31	92 22 37:17	39 53 24 40	21·19 24 33	25 (8 23 82	27 60 27 08	26.31 24.17	23 15 22 74	40 92 58 <b>6</b> 3	19 67 14:12	97 83 112:39	14 26 16 58	23 °5 19 87	1st hulf 2nd ,	102
345,625 330,279	39 364 18,416	290,152 278,265	181 645 134,5~4	64,810 40 735	88,996 75,: 86	657,219 5.6,50	55 482 41,723	170,0 .1 184,567	260,811 256,188	2,761 1,596	16,775 19,370	2,650 4,810	4,340 4,426	2,274 1,490	lat half 2nd "	} 103
43·15 37·44	98·50 37 81	41.00 43.85	45:26 57 48	40 67 36:92	48 05 36:41	47:11 47:37	35 66 41.74	50°-9 48°21	50 61 40 30	19 4 <b>2</b> 31 43	63 79 36:91	32·63 48 92	87·05 41·24	33:61 40 67	lat half 2nd ,,	}104
4·26 3·69	2·88 2·82	8·63 3 55	3·62 5 10	4 89 3 90	4·65 3·55	4·12. 4·18	4·08 4·79	8·75 8·61	3·75 3·65	2 49 2:53	2·72 2·97	2 32 3 28	1 66 1 84	2·15 2·96	1st half Ind ,	} 105
5.90 5.51	4·22 4·(0	5·03 4·96	4·26 5·97	6 37 5.89	6 70 5-15	5:5 ! 5 56	6·86 7·21	4 98 4 99	5:01 4:78	3·96 3 07	3·67 4·51	3 64 4 07	2-28 2-55	3·75 4·65	1st half 2nd	} ] 108
<del></del>											W:				,	
149,127 128,658	11,718 6,959	129,411 122,033	53.056 77.027	26,065 15 040	42,760 23,537	309,618 254,291	19,784 17,415	86,510 88,979	132,010 101,618	696 474	5,609 7,152	666 1,014	1,094 1,82 <b>5</b>	757 602	1st half 2nd ,	} 107
174,155 179,070	19.358 11,794	221,120 216,586	89,278 99,062	41,871 28,875	49,790 49 118	356,209 192,203	25,593	145,056 158,400	197.931 160,961	1,489 1,0~5	12,546 14,692	2,579	4,954 : 5,201	1,418 1,0.8	1st half 2nd y	} 10 <b>6</b>
323,292	31,076	350,581	141,829	67,486	92,550	₹65,827	45,877	221,008	32 ,941	2,185	18.516	2,995	0,502	2.175	1st half	
208,728	18,753	888,619	176,389	43,418	71,655	340,194	38,860	247,409	262,609	1,539	21,841	8,750	7, 26		2nd ,	} 109

APPEN

#### Analysis of working of each railway

Nore.-Railways not shown

		GAUUF					5′ 6″					ı
ij		Number	1 (a)	2 (a) to (f)	3 (a)	(a) to (d)	5 (a) to (f)	6 (a) to (d)	(n) & (b)	9 (a) to (g)	10 (a) & (b)	11 (0
Serial number.	Particulars.	Calon- dar year 1906 by half- years.	Danast	Bombay. Baroda and Central India.		East	Great	Madras.	Nizam's	North West- orn,	Oudh and Robil- khand.	Ango
	GOODS TRAFFIC-concld.	e										
	WEIGHT OF TRAIN AND TON- MILEAGE -concld.											
	Average weight of a goods train-											
110	Freight Tons	1st half	197:65 174 57	298-00 275-74	171 11 172 78	274·13 270·64	168·77 153·88	140·99 185·27	119-12	194:82	156-22	75.
111		1st half 2nd "		357:06 351:14	249:63 241:07	319·17 348·32	275·47 270·23	256·69 257·19	198:34 177:99	201.59 247.95 255.22	281 55 254 74	126
118	m., 1	Int Mali	183 43	C55:06	120.71	6.2 (0	444-24	31618	317:36	416.27	417:77	201
	Cost of Working and Proper.	and "	441 12	C26 88	413 : 5	618.1.6	421-11	392-16	291 92	456 81	407.59	280
113	Average cost of hading a goods train one mile . Rs. 1	1st half 2nd .,	2·19 3·24	4·17 4·52	3·24 2·91	2:27 2:28	2·45 2·51	2 55 8·27	1.74 1.76	2·50 2 87	2·02 2·01	2· 2·
114	Average cost of hanling a goods vehicle with its load one mile	lst half	15:41 17:13	20 65 21 52	27:55 26:12	11 76 11 84	19·20 20·21	20:22 25:86	15 39	20:13	11:39	24:
115	Average cost of hauling a goods unit (viz., one ton)	1st balf	2·12	2.88	3.64	1.59	2.78	8.49	2.21	18·86 2·42	15 27 2·49	24°
115 A	Average cost of hauling a	2nd .,	2.46	3.11	3.21	1.61	3.13	461	2.15	2.26	2.53	š.
	goods unit one mile, includ- ing interest on capital ex- pended on open line at the rate of 5 per cent, per	let half	4.60	4.59	646	2.97	4.87	6.82	4.95	4.50		
116	annum	2nd "	5.55	5 70 6:56	5·42 1·04	8·04 3·53	5·67 3·22	8 32	5·15 2·86	4·52 4·32 2·14	5·03 5·24	12· 9·
117	Average profit on working a goods train one mile . Rs. {  Average profit on working	2nd ,,	2 09	5.70	4.15	3-37	2.53	1.25	3.07	2 31	1 79	-0.
***	a goods vehicle with its load one mile Pies	1st half 2nd "	20·14 15·99	30·29 24·79	8·82 34·42	18:30 17:56	25·32 20·41	16:34 9:89	25·87 27 88	17:23 18:40	13·50 13·61	-4: 1:
118	Average profit on working a goods unit (mr., one tou) one mile	1st balf 2nd	2:74 2:31	4 23 3:63	1 16 4 f 1	2 47 2 40	3:68 3:16	2·83 1·77	3·65 8 73	2·67 2·20	2·33 2·25	-0·
	DETAILED PERCENTAGES OF EARN- (NOS AND EXPENDITURE.	Ì										
	Percentage on Total Earnings-											
119	Coaching traffic . Per cent. {	1st half 2nd "	31.91 30.08	31 67 37 80	30·05	29 94 29 94	27·29 32 70	37·52 37·16	23·37 23·47	30·50 31·69	47:37 46:10	47 <sup>-</sup> 34 <sup>-</sup>
120	Goods traffic ,, {	1st half 2nd .,	66-82 61-34	67 77 60 19	46 83 67-25	67·65 68·45	71·57 65·58	60 08 59:21	72 96 70 97	67·92 06·54	46·04 45·93	46 58
121	Sundries, including telegraph	1st half 2nd "	2 71 3·24	1·16 1·61	6·88 2·70	1·34 1·26	I·14 1·42	2·40 3·63	3·67 5·56	1.58 1.79	6·59 7·97	5°
122	Steam-boat earnings " {	1st half 2nd "	0·39 0·51		:: 	0·30 0 35	 	:::		•••		0.
	Total " {	1st half 2nd "	100.00	100.00 100.00	100.00	100.00	10 · 00 100 (0	100.00	100 00	100.00	100.00	100
	Percentage of Working Expenses on Total Earnings—				•		,					
123	Maintenance Fercent.	1st half 2nd ,.	7·90 11·42	8:52 16:87	22·48 12·94	9·10 9·56	10·27 9·96	12·70 21·58	12 13 11 09	14·22 12·97	11.77	32.1
124	Locomotive expenses . ,, {	lst half 2nd ,	13.82 15.75	17 83 20 18	17·29 12·13	10·12 10·68	19·32 23·23	18:63	10:48	24.14	14·68 17·60	27:
125	Carringe and wagon ex-	lst half	4·22 4·75	5.76	5·74 3·72	4.18	4.26	29·12 5·51	10 9x .8·28	22·12	18·42 3·77	201
126	Тгайо охропнен . , " {	2nd ,, 1st half 2nd ,,	7·74 9·43	579 618 7 85	18.04 14.62	4·55 8·01 9·00	5·42 7·12 9·28	7·02 7·58	5:88	3·40 7·36	3·17 9·81	12.
127	Goneral charges , a	2nd , let half 2nd ,	4·58 5·88	4·00 5·02	3·84 4·30	3 23 3 68	3·50 4·85	7 92 4·80 5·32	6·16 4·76 5·50	7·97 2·68 2·88	10.94 4.13 4.76	124 144
128	Miscellaneous expenses * "	lat half 2nd "	2·83 3·82	1·42 1·74	2.69	2·17 2·28	1·79 2·50	1.83 3.44	1 88 1 88	1.38	4·76 2·92 3·13	11.0 5.1
129	Steam-boat expenses . ,, {	1st half 2nd ,,	1·04 1·40			0·21 0·84				0.01	313	7·1
180	TOTAL WORKING EXPENSES	let half 2nd	42·13 52·45	44·01 51·05	71.78	87.82	46.36	50.99	37:49	58-52	50·20	98-6

DIX 18-continued.

system during each half-year of 1906-contd.

do not prepare these statistics.

				3′ 8 <b>}</b> ″				**********			T	***************************************	3' 6"		GAUGE	1
12 (a) & (b)	14 (a) to (d)	15 (a)	(6) de (r)	8 (r)	18 (a) to (c)	12 (g)to(m)	20(a) & (b	21 (a) to (f)	(a) to (j	23 (a)	1 (6)	30 (a)	9 (à) & (1	1 (0)	Number	Serial
Bengal and North- West- ern	Bhav- nagar- Gondal Jum- gad-Por- bandar	Burma	Eustern Bengal	Ilydera bad Go- daveri Valley.	Jodh- pur- Bikaner.	Raj- putana- Malwa	Rohil- kund and Kumaon,	South Indian	South-	Udsipui -Chitor.	Jubbul- pore- Goodu exten- sion.	Knika-	Khushal- garh- Kohat- That and Nowshera Durgai.	Raipur Dham tari.	Calenda year 190 by half years.	number.
121·43 105 93	81 25 75:47	83·24 79 54	89·24 113 26	52·92 38·0	107·79 85 13	182 93 180 19	90 £6 100 94	78:44 70 97	81:F2 77:70	62:93 54:06	5 <b>7</b> 90 65 <b>6</b> 2	20°12 12 86	13 86 14 (5	38 51 52 59	1st half 2nd ,	}110
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4.00	9·17	M. P. F	9.44	<b>5.00</b>	0.04	4.57		0.00		10.10	11.05		22.40	11.00		
4·28 5·18 2·13	11·36 2·10	7·55 8·05 1·08	7·88	7·30 9·75 2·05	3.91 5.97 2.45	4·87 4·75	5 72 5 33 1 80	8·02 7·62 0·92	6 79 8 35 1-18	19·18 27·94 3·86	11 95 10-03 0 60	91.71 71.14	32 40 25 72 - 0 62	11:96 11:04 0 86		3 A.
1.75	1.45	0·43 9·01	2:37	1 '32 21 · 87	1·31 20 20	1 89	1.80 1.35	0·92 8·40	10.01	2:34	0·18	0°57 35°84	-0 30 -14·12	0.07	lst half 2nd ,,	
11'41	10.40	3 67	18 70 3-29	15·05	10 50	11.65	12 35	8 41	6 81	21.18	1.28	15.35	<del>-7.76</del>		les half 2nd ,	
3·37 8·09	4:97 3:68	2·40 1·03	4 02	4·99 3 85	4·37 2 96	3·50 2·78	\$ 83 2 58	2·24 2·33	2 68	11·58 8 37	1:08	15 45 4:71	-8.23 -4.21	4 30 0 39	lst half	}118
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100.00	100.00	100.00	100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00	100 00 100·00	100.00	100.00	100 c0	100.00	100 00	100 00 100 00	1st half 2nd	
						Ť.										
12:30 16:37	11.77 14.87	14·45 20 78	16·47 13 03	21·05 20·26	8·69 21·92	8 52 10 91	6·72 9·43	17·22 13·38	12·15 17·57	937 2357	17·24 19·20	9.01 17.86	46·13 31·54	:3 70	1st half and "	}123
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6.95 7.78	7·82 8·64	8-64 10-52	9.84	6.76 10.00 7.29	5·19 6·71	6·48 7·88	7·19 8·78	7·61 7·68	7·56 9·09 7·20	6·F9 7·91	12:01 15:80 8:35	8 72 13·24 10 81	22 37 21 19	7.70	1st half 2nd .,	} 126
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1.50	1 70	1·32 0·80	1.42	2-19	2.48	1.74	1.42	1.42	1.90	1.63	2 17	1.02	4.43	0 82	let half 2nd ,, !st hal!	}128
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#### APPEN

#### Analysis of working of each railway

Nore.-Railways not shown

				1.		*******		<del></del>				
		CAUGE.					5′ 6″					
Serial	PARTO GLADS.	Number	1 (a)	2 (a) to (f)•	3 (a)	(a) to (d)	(") to (f)	6 (a) to	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
number.	LARTI Ugalo.	Ca'on- dar year 1906 by halt- Years	Bengal- Nagpur,		Fastern Bengal.		Great Indon Peninsula	Madrar.	Nizam's Guarus- tord State.	North West-	Oudh and Rohil- khand.	Assam Bengal
	PER MILE OF LINE MAIN-							TABL	E A 1	VIAINT	ENAN	CE O1
131a	TAINED  General superint indense (includ-fing office expenses) . R*. ?	1sthulf 2nd ,,	140 19 156 09	1911: 0 183-59	261:85 701:24	22× 59 230 49	150 48 151 93	150.69 142.39	146 03 155:54	148·82 119·54	140.44	
1324	Maintenance and renewal of percaneut-way	1st half 2nd ,	251·99 354 : 1	4749/3 721/42	1,353:69 8.0 63	810 29	714:07 461:51	443 77 582:46	233 26 295 81	613 22	303:73 457 95	411.10
133a	Repairs of bridges, &c	1st half 2nd ,,	91:97 66:36	113987 157 36	385°64 192 89	255-20 17±61	215/61 165/47	126·06 414·63	359 10 199 72	58:98 65:37	190 05 70:87	121·4 142·5
1344	Conservancy of rivers	lsthalf 2n t "			5.54 0.64				0.08	10 05 13 74	0 28 1.57	
135a	Repairs of stations and buildings, {	1st ladf 2nd 2	103 3 <b>6</b> 1, 0 7a		.:31·18 353 46	252:20 257:35	145:33 130 00	91:20 122:93	44 63 2 \ 80	209·19 192 93	108:20 131:54	67 0 72 1
196a	Other clurges (net)	1st half 2nd ,,	4/1:31 73/65	8131 85 92	16733 19+21	161 35 174-29	85 92 89 24	194 15 278 44	60:04 (9:91	145 17 121 41	89:00 83:83	7 1/8 17/3
1 37 a	Total maintenance, &c.	1 d bulf and		1,310 02 1,294 . 2	2 501 ·2 2 227 14	1,7e6 70 1,675 06	1,311 11 100/15	::05:87 1,580 83	803 13 711 78	1 264 (8 1 159 20	814 70 881 22	781°2° 860 1
1315	FER MILE OF TRACK, INCLUDING SIDINGS. "oner I superintendence (include tu, office expenses)	1st la 16 2nd	119 62 132 12	127/84 (22 71	163 50 185 67	14517 11618	107:61 108:51	121/18 150/61	129:83 135 L3	115 65 116 08	121:63 117:53	129·9 136·2
1326	Maintenance and renewal of {	1st boli 2mt :	217 13 200 10	50408 482 24	845/31 524/29	513 99 514 59	540 65 3), 75	360°60 4° 0°97	25 08 <b>8</b> 262 00	507:63 47a 62	265-64 397-17	364 0 354 4
1334	Ropairs of bridges, Acc	1st half 2nd ,	78:32 5. 10	• 91 .0 105 19	21070 10180	162 07 10 / 64	1*1*19 118*18	101·13 342 -8	319 26 159 50	15 SI 10 71	161 ; 9 61 51	107 5 126 1
1315	Consurancy of rivers	1st half			3 16 0 42		••• •••		0 07	7:81 10:67	0°25 1 36	
1956	Repairs of statsons and buildings., {	1st half 2nd ,	58:02 110 <b>6</b> 3	90 95 95 71	236 35	160°16 182 48	103 93 92 54	75.84 101°51	r9 67 26 49	162:57 143:75	93 70 114 17	594 63 8
1366	Other charges (net) {	1st balt Jud.,	62 35	7608 5941	101 '8 103 19	19246 110 (9	61 44 63 71	152 12 229:91	50:3a 35-47	112.81 95.58	77 08 72 80	30 8 50 7
1875	Total maniforance, &c ,	Isthal' 2nd "	537:40 656:50	87 - 95 86 - 23	1,361 7 1,3.2 71	1,033-78	937 82 715 62	822'67 1,305 38	79 C65 632*. 9	58734 899 64	722 80 761 81	691 6 761 3
1318	TER TOTAL TRAIN-MILE. General supermetridence (melad- ing office expenses)	lst halt 2nd ,,	1:30 1:45	13) 137	1°87 1.34	0.95 0.99	0 8 t 0 91	1:36 1:61	1·14 1 73	1.00	1.07 1.11	2·1
102c	Maintenance and renewal of porument-way	1st halt 2nd ,,	2 37 3 29	5 74 5 37	7:06 3:77	3: <b>3</b> 5 3: <b>45</b>	3:93 2:77	4·01 5·15	2·79	4 67 4 06	2:35 3:77	6·7
133 <i>r</i>	Ropairs of bridges, &c	1-t halî 2nd ,,	0.85 0.56	1 00 1 17	2 01 2 19	1 06 0 74	1·19 0·99	1·14 3 66	3:55 2 13	0.40 0.13	1 45 0 59	1:1 2:1
134r	Conservancy of rivers	1st half 2nd ,,			0.03		•••		:::	0.08 0.08	Ü <sup>:</sup> 01	:::
135e	Repairs of stations and buildings , {	154 half 2.14 ,,	0.96 1.21	0 94 1 07	1.73 1.70	1 04 1:22	0:80 0:77	0·82 1·00	0 44 0 33	1 41 1 27	0.83 1.08	1.0
100e	Other charges (not)	lat half 2nd ,.	0-87 6-69	0 59 0 66	0.8	0.67 6.71	0·47 0·53	1:66 2:46	0·59 0 14	0.83	0.48 0.48	0.5
137c	Total maintenance, &c. ,	1st half 2::d	5:85 7:20	9 09 43 G	13:06 9%8	7 07	* 7:22 5:97	899 13 97	8·81 7·93	8:59 7:67	6°38 7°25	12°
<b>1</b> 81 <i>d</i>	PER 1,000 GROSS TON-MILES, General superint-relence (includ- ing office expenses)	ist half 2u i "	0:20 0:25	0·20 0·22	0.27	0·12 0·13	0·14 0·17	0.25 0.31	0.25	0·18 0·17	0.33	0.5
132d	Maintenance and renewal of permanent-way	1st half 2nd ,,	0.87 0.56	0 78 0 88	1 39 0 7	0 43 0 14	0.88 0.21	0 75 1.01	0·17 0·56	0·84 0·72	0·4× 0·79	2.1
1334	Repairs of bridges, &c , {	1st half 2nd "	0·13 0 10	0:15 <b>0:1</b> 9	0 to 0.43	0·14 0·09	0·21 0·18	0-21 0 72	0.86 0.90	0*07 C 08	0°30 0°12	0.6
1842	Conservancy of rivers	1st half 2nd "		·	0·e1		,		:::	0 01 0 01		
1354	Repairs of stations and buildings,, $\Big\{$	1×t half 2nd ,,	0·15 0·21	0 11 0·17	0:34 0:33	0·13 0·15	0·14 0·14	0·15 0·21	0.68 0.68	0·25 0·23	0·17 0·23	0.8
1304	Other charges (net) , {	isthalf 2nd ,	0 06 0 11	0.00 0.11	0·15 0·17	0-10 0-10	0.10 0.08	0.81 0.48	0.10	0·18 0·15	0·14 0·15	0·1
1374	Total maintenance, &c, {	1st half 2nd ,,	0.81 1.33	1:56 1:57	2·56 1·90	0°91 0°91	1·25 1·10	1·67 2·73	1·49 1·36	1.86	1·31 1·52	4-0

DIX 18—continued.

## system during each half-year of 1906-contd.

do not prepare these statistics.

				3	<b>å</b> ''					~				2′ 6″		GAUGE.	1
	12 (a) & (b)	14 (a) to (d)	15 (a)	(b) & (c)	8 (c)	18 (a) to (c)	(g) to(m)	20 (a) &		( 22 (n) to(j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 ''	Number.	i i
	Bengal and North- West- ern.	Bhav- nagar- Gondal- Juna- gad Por- bandar.	Burma	Eastern Bengul.	llydora. bad-Go- day.ni Valley.	Jodh- pur-Bi- kaner	Raj- putana- Malwa,	Rohil- kund and Kumaca.	South Indian	South ern Moh- ratta.	Udni- pur- Chitor	Jubbul pore Gondia exten- sion.	Kulkı- Simla.	Khushal- garh- Kohat- Thal and Novshera- Durgai.	Raipur- Dham- tari,	Calendar year 1906 by half- years.	Serial number,
		WORK	BAND										•				1
	86.25 95.15	49:55 57:81	143.00	107:81	127:00	21:31 22:31	96·59 94·67	57 61 68 -0	163.58 163.86	78-19 77-17	79.83 37.16	105:49 91:93	247 68 257 87	153°24 13'6'46	7·00 7·01	1st half 2nd "	} 131a
	828·42 366·02	247·85 207·6±	977:21 488:41	601°27 335°08	729 70 370 69	171 54 427 00	357.51 369:64	117 61 1.8.71	252 02 255 60	272.83 312.74	13256 271 91	123°11 126°51	207:60 204 H	2:31:61 165:95	111:50 92:99	19t half 2nd ,,	} 132a
	111 99 143 03	5·75 7·65	206:49 128:00	77·11 217·13	23 65 33·19	4·13 2 36	68 16 80 02	34:39 56:09	187:73	46.09 51.22	0 95 4·23	8·11 12:90	37·13 718·57	98.78 119.58	11.20 21.11	1st half 2nd ,,	}133a ·
	3.00 3.00		0.10 0.10	 0 68				- 8995 4 91					••	:	 	1st half 2nd ,,	}13 <b>4</b> a
	45:90 68:77	18·19 41·59	117:12 165:25	100 26 147:22	38-85 31-37	18 1"; 16 41	64°15 53°39	29.82 8.4%	69 98 69 98	44:28 65-17	18:82 27:15	23 21 35 72	34 29 28 32	89:58 93:10	-4:87 22:00	14t half	}135a
	40.01 65.45	28·34 22·77	94·63 159·23	109-95 112-19		2 ro7 10 58	39 95 47 55	1 <sup>-6</sup> 1 15 <b>63</b>	37:92 4:10	83.60 61.38	9	23:93 8:38	17 21 • 9/57	* £6.06 09.59	9:33 49:61	1st half 2nd ,,	} 186a
	613·50 742·02	919:66 357 41	938°01 1,087°59	1,005:40 930 32	9°5°50 632 02	73.718 478:66	620°69 ° 663°27	263:25 336:12	941:28 605:09	47 9 67 567 98	19 ± 55 352 72	201·17 276 43	513 91 1,#19:03	6.11°27 498°58	131 16 195:78	1st half 2nd ,.	} 187a
	71.78	45*06	121-43 122-29	91:46 99:81	110 72 115:71	20:23 21:16	77110 80130	70 01 80 03	141:91 141:78	70°70 69 51	27 36 31 + 1	98:15 8 <b>4 9</b> 0	2:23:00	113:74	6169	1st half	}12 <b>1</b> 5
	82 03 284:72 815:71	52·57 225·39 183·80	321°93 415°: 0	510:28 251:83	654:19 883 43	162 91 405 04	1	127:78 157:91	311 96 237 31	215:46 281-65	124:45 257:33	114/83 116/84	232 52 187 12 181 02	210:08 155:31	6 61 105 03	2nd ,,	} 1326
-	97°0 123°37	5°23 6°26	176·16 109 00	65 14 184:82	21·27 30·12	3:93 - 2 :3 :	58-17 68-24	29.89	310.21 165.58	41.53 46.13	073	7.55 11.91	33:52 657 91	89 73 1(8 53	87 66 10:44	2nd ., 1-t half	} 1386
	0·80 2 84		0.25	0.57				-3:43 4:27							22:78	2nd ,,	} 1345
	89·79 59 82	16·51 37·82	100:21 143:27	92·73 125·14	3195 2521	17:22 - 15:57	54 99 62 65	25:90 30:23	31· 7 61·82	99:86 53:97	17 65 25:41	30·93 13·92	3) 96 25 53	81:37 29:96	-159 20:79	2nd ,, 1st half 2nd ,,	135b
	3 k 69 56 46	25·75 20·71	60.75 135.60	93 31 25-61	51°15 61°02	19 05 10 01	04-69 58-89	-1:11 31:53	23:73 4:33	30 28 55 28	5.88 8:62	22·23 7·74	15.54 8.90	:0 p2 35:94	8:79 46:77	1st half 2nd ,	} 136b
	#31 87 640:03	817-97 206-86	\$00.73 926.11	813 25 790:78	877 48 568:49	2.3.34 454.01	529 63 566:26	218 80 292 67	832 04 614:12	427:83 511 57	186 23 330:18	278 72 255 31	491 01 1,000 71	576 14 452 69	125°71 181°56	1st half 2ud .,	} 137b
	0.88 0.88	1·07 1·51	1·19 1·20	1·09 1·13	1:45 1:91	0·43 0·46	0·7:1 0 79 !	0 79 0:91	1 53 1 49	0:84 0:92	1/53 1/51	2·73 2·14	3°18 3°25	1.71 1.30	6:21 0:21	1st half	}131c
	3 37 3 74	5 33 5 41	3·17 4·09	6·07 3·24	8 80 5 59	3·45 8·94	2.89 3.11	2 01 2 14	€ 37 2·41	2·01 3 71	5·11 11·07	3·19 2·95	2 51 2 60	2 ::5 1 63	3 30 2 77	1st half 2nd ,,	}102x
	1·15 1·46	0·13 0·20	1×73 1 07	0.78 2.10	0·29 0 51	0.08 0.05	0 55 0 67	0·47 0·76	3.32 1.20	0 50 0 <b>6</b> 1	0.12 0.01	0·21 0 31	0·53 9·13	1·09 1·15	0:31 0:72	1st half 2nd ,,	} 130c
	0.04 0.01	***	•••	ö <sup>:</sup> 01				-0.02 0.06	•••		•••	:::		:::		1st half 2nd ,,	} 1840
	0.48 0.70	0.09 1.08	0:10 1:11	1·10 1·42	0·17 0·17	0 26 0 34	0·52 0·63	0·11 0·47	0.37 0. <b>6</b> 3	0·48 0·73	0 72 1 09	0.82 0.86	0.18 0.18	0°98 <b>0 81</b>	-0:11 0 66	1st half 2nd ,	} 185¢
	0.41 0.66	0.61 0.59	0·79 1·33	1·11 1·10	0.72 1 03	0·10 0·23	0°31 0°31	0.10 -0.03	0·37 0 04	0·36 0·74	0°24 0°36	0·62 0·19	• 0 25 0:12	0.98 0.38	0 28 1 48	1st balf 2nd ,,	}136c
	6:30 7:58	7 58 8:70	7·87 9 10	9:00 9:00	11 76 9:53	4 72 10:03	5 (0) 5:58	3:61 4:53	8:99 6:30	5 12 6 79	7 64 11 20	7·61 6·14	7·64 15·49	6 98 4:77	8:99 5:84	1st half 2nd .,	} 137c
	0 24 0 27	0·36 0·54	0:35 0:35	0:85 0:85	0·17 0 61	0 12 0 14	0 19 0-23	0·21 0·22	0 50 0 <b>49</b>	0.58 0.58	0·4.3 0 49	0.80 0.80	2 51 2 37	1 88 1:42	0·13 0·17	let half 2nd ,,	} 191.4
	0·03 1·03	1·82 1·93	0·92 1·19	1·08 1·00	2·78 1·86	1·00 2·81	0.76 0.87	0 62 0 53	1·10 0·50	0:96 1:29	1·43 3 54	1 00 0.31	· 2·11 1 87	2·76 1·77	2 13 2 20	1st half 2nd ,,	} 132d
	0.35 0.35	0.04 0.02	0.50 0.31	0°25 0°65	0 09 0·17	0.03	0·11 0·19	0°15 0°19	1 19 0 56	0·16 0·21	0.0 <b>0</b> 0.01	0·07 0·09	0°33 6°59	1·15 1·24	0:22 1:57	14 half 2nd ,	}130a
	0-01		•••	;	:::	•••		- 0.01 0 02		:::	:::			•••	 •	Ist half 2nd ,,	} 1344
	0·13 0·19	0·13 0·89	0·28 0·41	0 36 0:43	0·15 0 16	0·10 0·10	0·14 17	0·13 0·11	0·12 0·21	0·15 0·27	0 20 0 84	0 27 0 27	0:35 0:26	1·97 0·35	-0 00 0:52	1st half 2nd ,,	} 135d
	0·11 0·18	0·21 0·21	0.88 0.33	0.38 0.88	0·22 0·34	0·12 0·07	0.10	-0.01 0.05	· 0.01	0.12	0.08	0·19 0·16	0·17 0 09	0 68 0 · 41	0·18 1·17	ist half 2nd ,,	} 136d
	1·73 8 08	2·57 3·14	2·28 2·65	3:30 2:76	3·71 3·17	1.87 3.18	1·32 1·55	1·12 1·12	2·93 2·07	1·67 9·34	2·18 4·54	2·89 1·99	5·52 11·18	7:57 5.19	2·56 4·63	1st half 2nd "	} 187d

APPEN

## Analysis of working of each railway

Nore. - Railways not shown

	1	iauge.		*********		************	5' 6"	-				ī
ěr.		Number	1 (a)	2 (c) to (f)	3 (a)	(a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (y)	10 (a) & (b)	11 (a)
Serial number.	PARTICULARS.	Calon- dar year 1906 by half- years.	Reugal- Nagpur.	Bem- bay, Buroda and Contral India.	Eastern Bengul.	East Indian.	Great Indian Fenin- suls.	Madra*	Nizam's Guar- anteed State,	North West- ern.	Oudh and Rohil- khand,	Aream Bengal
									TABL	E BL	ОСОМ	OTIVI
	Average price of Coul . Re. {	1st half 2nd	2.65 2.65	17:41 16:46	6.20 6.20	1·97 1·97	11:27 11:49	9·69 11·09	4 68 4 71	13°30 13 80	8 30 8 51	7.4
	tuel per ton interms of . Wood . " {	1st half 2nd ,,	:::	: ::	.:	 e			:::		:::	:::
	PER TOTAL TRAIN-MILE.											
138a	General superintendence (including office expen-	1st half	1.02	1 03	0 55	0 74	0.64	0.65	0 75	0.26	0.04	0.5
	kon) Annas (	2nd 🗾	1·11 2·43	198	0·54 1 30	0·77 2·13	0·71 2·70	0.08	0 82 1.78	0·55 1·51	0.61 1 13	0.8
139a	Running exponses ,, }	12pl	2 50	3 04	2.70	2:25 0:89	2.92	2 05	1.76	1.45	1.12	1.6
140a	Fuel	let half 2nd ,,	1124	6 91	3702	0::1	4.67 4.65	4:13 1:10	1·90 1 87	5:02 5:53	3: <b>6</b> 0	3·0
141 <i>a</i>	Water , {	1st half	0·17 0 J4	0.51	0 10	0.13	0.30	0.31 0.33	0°27 0°26	0.25 0.27	0·15 0 18	0.5
142a	Oil, tallow and other stores , }	let balf End .	0.53	0.55 0.19	0.10	0 13 0 40	0·49	0.57 0.15	0 35 0 38	0 28 0 <b>26</b>	0.58 0.33	0·2 0·2
143a	Maintenance and renewal of locomotives	14t half	3·14 2.85	4.55	3°59 2 13	2·46 2·41	3·16 3·55	3 45 4 22	2·02 2·16	4·09 3 23	1.60	1.7
143A	Maintenance and renewel	1st half	0.16	0.37	0.11	0 23	0.53	011	0.02	0.31	1·47 0·10	2·1
(u)	of machinery, tools and plant ,,	2nd ,,	0.12	6 71	0.41	0 14	0.26	0.23	(1.02	0.47	0.82	0.0
144a	Other charges (net)	1×t half 2nd ,,	1 71	1 32	0:32 0:49	0.07 0.90	0 95	2 10 2 23	0:48 0:51	2·12 1·31	1·71 1·58	1.0
<b>14</b> 5a	Total locomotive expenses	let half 2nd ,	10°25 9 92	19 00 17 90	10 05 9:26	7.87 7.94	13:59 13:93	13·19 11:89	7·60 7·81	14:47 13:07	9 GG 9:10	8·4 9·3
	(Coal (Kurhur ( baroe) . lbs.)	1st half 2nd "	66:03 65:02	56.67 58.71	59 69 62·12	67:59 67:59	58:00 57:05	59 65 59:36	56/81 55/61	55:98 56:12	57:59 56:37	45.0 54.0
•	Fuel consumed in terms of	1st half 2nd "	•••	:	:::	:::	:::		 <b>a</b> .			
	PER ENGINE-MILE.											
1885	General superintendence (	lst half	0.87	0.85	0.37	0 55	94.0	0 57	0.01	0.18	0.24	0.7
	(including office expen-	2nd "	0.92	0 91	0.37	0.57	0.63 2.25	0°58	0.71	0 47 1:33	0·54 0·96	0·6 1·3
1395	Running exponses, }	1st half 2nd "	2·02 2·18	2°51 2°53	1 30 1 41	1.58	2.55	1.75	1·53 1·50	1.25	0.08	1.2
140b	Fuel	1st half 2nd "	1 05	51-1 5176	1.85 2.05	0.69 0.68	4·10	3·48 4·02	1·63 1·50	4.60	3·91 8·06	1 9 2·2
1416	Water ,, 5	1st half 2nd "	0·14 0·11	0·12 0·39	0·12 0·13	0.10	0·30 0·29	0·27 0·29	0°23 0°22	0·23 0·23	0·12 0·15	0·1
1426	Oil, tallow and other stores	1st half 2nd "	0·24 0·26	0°45 0'41	0°27 0°28	0·25 0·29	0.39 0.43	0 31 0·38	0·30 0·31	0·24 0·23	0.30 0.58	0·2 0·2
1436	Maintenance and renewal	Ist half	3.63	3129 3146	2·46 1·45	1.84	2.75	2·91 3·61	1.72	3 54 2 77	1·43 1·24	1 3 1.6
143A	of locomotives	ind ,, let half	2 36 0·15	0.26	0 28	0.17	3 11 0·20	0.12	0.04	0.52	0.16	0.0
(6)	of machinery, tools and plant , ,,	2nd "	0.13	0.28	0.58	0.10	0.53	0.50	0.04	0.40	0.80	0.0
1446	Other charges (not) . ,, -{	let half and "	1:43 1:34	1.00 0.50	0·33 0·33	0.72 0.67	0 86 0 86	1.57	0·42 0·41	1·83 1·12	1 45 1 17	0.8
<b>14</b> 5 <i>b</i>	Total locomotive expen-	1st halt 2nd ,,	8:52 8:22	15:68 14:94	6·87 6·30	5·86 5·57	11:83 12:20	11·12 12·74	6 51 6:65	12·50 11·22	8·17 7·72	6.8 0.0
	Designation of the Party of the				,							
	Coal (Kurhur-fbarco), lbs. }	let half 2nd ,	55:08 84:16	46.70 49.02	40°83 42°24	51·86 50·27	50·49 49·95	50°28 50°80	48:58 47:31	48·38 48·17	48°69 45°27	35·4 40·6

DIX 18—continued.

## system during each half-year of 1906-contd.

do not prepare those statistics.

	GAUGE.		6"	2′		,					3′ 3∦″					
ş;	Number.	1 (0)	9 (h) &(i)	:0 (a)	1 (1)	23 (a)	22 (a) to (j)	21 (a) to (f)	20(a) & (b).	2 (g) to (m)	18(a) to (c)	8 (c)	3 (b) and (c)	15 (a)	14 (a) to (d)	2 (a) & (b)
Berial number.	Calcudar your 1906 by half- years.	Haipur- Dham- tari.	Khushal- gorh- Kohat- Thal ai d Nowshers- Duegai.	Kalka- Simla	Jubbul- poro- Cloudia exten- sion.	Udai- pur- Chitor.	South- ern Mah- ratia.	South Indian.	Robil- kund- and Kumaon,	Rajpu- taus- Malwa.	Jodh- pur- Bika- ner.	Hydera- bad- Goda- vari Valley,	Eastern Bougal	Burma,	Bhav- nagar- Gondul- Juna- gad-Por- bandar.	Sengal and forth- West- ern.
	4				•	- 43							· <b>"</b> pv		78E8.	XPE
]	1st half 2nd "	2·57 2·64	13:29 13:47	19:20 13:58	3:05 3:62	18:65 18:74	10.31 10.13	12:81 13:21		14·38	14·58 14·80	4·77 4·87	6·78 8·53	10.58 11.40	15·13 15·41	6·86 6·71
<u> </u>	1st half 2nd ,	."							7 03 5:32	***	 			 	:::	
)	lst half	<b>0</b> °58	6.28	1:45	1.19	1· <b>G</b> 6	0 65	0.60	0.79	0.28	0.35	0.56	0.61	0.83	0.4	0.42
\$ 138 <i>a</i>	2ad .,	0 63	0.21	1 <b>°</b> 09	0.50	1 68	0.75	0.59	0.81	0.43	0.31	1.12	0 57	0.82	0 99	0.43
}189a	1st half 2nd	1.00 0.57	1·13 0 90	2·53 2·49	1 20 1 I I	0·72 0·75	1:69 1:69	1.65 1.63	0·75 0·78	1.68 1.76	0.69	1.53	1.09 1.51	2·68 2·56	1·30 1·30	0·74 0·77
}140a	ist half 2nd ,	0:45 0:19	1°50 1°60	• 9:04 10:92	1 10	5:29 1:71	2 60 2 70	2-93 2-08	3 53 5·18	3 82 4 90	4 18 4 17	1 29 1 30	1 °9 2 41	3·53 3·50	3·49 8 03	1·87 1·94
} 141a		0 28	0·49 0 13	1·17 1 53	0.33 0.33	0°30 0°26	0°22 0°22	0·18 0 14	0·18 0·15	0°23 0°27	0.45 0.42	0·19 0 :1	0·14 0·16	0 32 0 32	0·13 9·17	0·15 0·15
} }142a	1 4 1 16	0°26	0°36	0:47 0:47	0 21 0 20	6 30 0:31	0·16 0·17	0 25 0 28	0:25 0:25	0·30 0·28	0:22 0:33	0·19 0·23	0°23 0°28	0°35 0°32	0°24 15 0	0.18
)	lat half		1.27	2 69	0.56	1.49	2 01	4:64	1-14	2.66	1.30	0 88	3 · 1:3	1.61	6-86	0.99
\$143a	Zud ,,		0.75	2.85	0 91	1.22	2 71	3 14	1.40	2 10	1 34	1 56	1.40	2.33	1 29	1.04
143 A (a)	lst half 2nd ,,		0·11 0·08	0.02	0 07 Oraj	0°20 0°52	0.21	0 10	0.17	0.06	0.12	0.04	0.52	0.17	0 08	0.02
} 144a	ist half and ,	1:31	0.39 0.39	0 07 0 33	3 01 2 68		1.12	0°14 0°30	0:69 0: <b>47</b>	0·78 0 62	0 81 1 25	0·79 0 88	1·54 0:35	0.69 1.08	0·52 0 .5	0·69 0·76
} 145a	1st half 2ud ,	5110 4126	6:13 5:26	17:44 19:86	8·12 7·61	9.87 9.83	8·62 9 59	10·19 9 60	7 86 7 21	10°47 10°37	8 14 8 8 1	5.86 6.71	9·15 6·63	10·18 11·68	7 26 7 34	5·10 5 30
)	lst half 2nd ,	26°28 25 89	18:91	73 36 81 .0	F8:36 56 83	35:22 31.81	85·93 36 69	31-92 33 60	::	97:76 36 91	43°05 39°40	37·72 37 34	39·01 39·65	45 09 41.82	32:31 17:48	41 24 40 13
}	ist half 2nd .,	: <b></b>				٠.			115:77 114 09		 	·	::: **			:::
		0.14	0.40	1.01	0.110					0.10	00	0.86	0:18	0.69	0.66	0.32
}1385	ist half and ,,	0.60	0·48 0·63	1 31	0°99 0°75	1·55 1·58	0.58	0.22	0°61 0 65	0 ±0 0 55	<b>6.3</b> 7	1.03	0.44	0.69	0.91	0.32
}139 (b)	1 thalf 2nd ,,	0.96	0 93 0 83	2:30 2 10	1 90 0 96	0.67 0.69	1·14 1·51	1°50 1 49	0·69 0 63	1·15 1·52	0 65 0 73	1:37	0.85 0.94	2·20 2·13	1.67 1.20	0.63 0.60
} 140b	1st half	0.46	1·47 1·35	8 20 9 41	1/15 1/22	1.86	231	2.66	2 77	3:35 3:45	4·19 3 87	1°16 1 16	1·47 1·87	2·91 2·92	3·11 2·79	1.21 1.28
}1416	1st balf	0.27	0.41	1.66	0.31	0.08	0.19	2 81 0·16	2.26 0.11	0.51 0.53	0 42 0 89	0·18 0·18	0·11 0·13	0°26 0°26	0·12 0·15	0·1·9 0·12
} 142b	2nd , 1st half	0.52	0.30	0 43	0.7	0 24 0 28	0.20	0 13	0.13	0 26	0.31	0.17	0.18	02-0	0·21 0·29	0·16 0·15
,	2nd ,, lat half	0.21	1.01	2.41	0.79	0·23 1·40	0.15 1.79	0 25 4·23	0 20 1·13	0·24 2·30	0°36 1°21	0.20	0·21 2·68	1.32	0.77	0.81
\$143b	2nd ,,	0.37	0.63	2'41	0.76	1.45	2.11	8.11	1.11	2.07	1.24	1.51	1.09	1.94	1.19	0.85
143 A (b)	1st half		0.00	0 02	0.02	0.19	0.10	0.03	0.14	0 32	0.10	0·01 0·05	0·17 0·19	0·14 0·13	0·07 0·08	0.04
} (6) }1445	2nd ,, let half 2nd ,,	1.96 1.20	0.06 0.32 0.26	0.08 0.08	0 01 2 48 2 22	0·49 	0·19 1·03 1·02	0·14 0·13 0·27	0·13 0·54 0·37	0.88 0.88	0·14 0·75 1·15	0·70 0·78	1·21 0·27	0.26 0.20	0'46 0'17	0.63 0.63
} 145b	1st half 2nd "	5:38 4:05	5·04 4·43	15:82 16:80	6:05 6:85	9·23 9·18	7:67 8:56	9:54 8:77	6·12 5·81	9·05 8·93	7·92 8·20	5·27 5·99	7·15 \$·14	8·37 9·28	6:47 6:76	4·18 4·35
h	1st half 2nd ,,	25·24 24·65	15:54 14:03	65:66 65:66	48 21 47:23	32·92	31.96	29:04 99:75	·**	32·62 31·96	40·17 86·50	33.80	80·47 30·78	87:03 84:88	28·78 25·30	33·81 32·91
}	1st half 2nd ,,					29.86	82.71	29.75	90.90	••			,,, ,,,	***		***

APPEN

## Analysis of working of each railway

Nore.-Railways not shown

***************************************		GAUGE					5′ 6″				***********	1
er.	_	Num-	1 (a)	2 (a) to (1)	3 (11)	4 (a) to	5 (a) to (7)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
Serial number.	Particulaer,	Calon- dar year 1966 by hall- years	Bengal Nagpur		East on Bong d	F. set Indom.	Great Indian Pennsula.	Madrus.	Nizam's Guaran- toed State.	North Western,	Oudh and Rohil- khund.	Assum- Bonyal,
t	PLR 1,000 GROSS TON-MILES.								TAB	L <b>K</b> B.—1	OCOM	OTI <b>V</b> £
138c	Goneral superintendence (melud-(ing office expenses) . Rs (	lst bolf 2nd o	0 16	0:15 0:18	0 11 0-11	0:09 0:10	0:31 0 i:3	0·13 0·13	0°13 0°14	0·10 0·10	0°13 0°13	0·31 0·26
1390	Running expenses , , -	Ist half and "	0::8	0 15 0 4 )	0 37 0 40	0°27 0°29 <b>∉</b>	0 47 0·54	0:37 0:10	0:30	0°28 0°26	0.23	0·53 0·46
<b>14</b> 0æ	Finel	1ot half 2nd	0.96 0:22	1:05 1:12	9.53 0.58	0·11 0·12	0:81 0:87	0°76 0 92	0·32 0·32	0:96 0:98	0.78 0.76	0 79 0 %6
· 141c	Water	1-t had 2nd ,	0m3 0 02	0.05 0.08	0.03	0.05	0:0d 0:0d	0 06 0 07	0.05 0.05	0.01 0.02	0.03	0.07 0.04
142.	O.l. tallow and other stores . $\ \ ,\ \ \left\{$	ist hai 2nd ,.	0.05	6 03 0 08	0.08	0 01	0.08	0 07	0.08 0.07	0 05 0 05	0 07	0.08 0.08
143c	Maintenance and renewal of locomotives	1 ( bal) 2nd	0-19	0:72 0:67	0.70 0 11	0 32 0 31	0.55	0.61 0.83	0·34 0·37	0·74 0·57	0°35 0°31	0 55 0 61
143 A(g)	Maintenance and renewal of machinery, tools and plant	let ball 2nd	0.02	6·10 · 11	0.08 0.08	0.63	0.02 0.01	0·03 0·05	0.01 0.01	0 05 0 08	0.04 9.07	0·02 0 <b>10</b> 3
144.	Other charges (not)	156 h di 2m/ ,,	0.28 0.28	0 20 0 18	0°07 0°09	0.13	0:15 0:15	0 °9 0 °1 k	0.08	0:38 0:23	0:05 6 29	0°34 0°31
145c	Total locometry expenses {	1st bab 2nd	161	2 83 2 71	3:97 1 78	1.01 1.03	2:36 2:56	2:45 2:93	1:29 1:34	2:60 2:88	1 98 1 91	2:69 2:67
	Fuel consumed hardsaree).	Ist hat	1 to 54 177 98	135 14 152 95	187 11	11.48 15.036	161 08 168 24	176 90 186 68	154/34 152/56	161:05 159:27	188 61 179 60	230:51 250 <b>0</b> 8
	in terms of Wood . n {	let half 2nd									.::	
	PER TOTAL TRAIN-MILE.								TABLI	E 0CA	RRIAG	E ANI
146a	General supercatendance (in- cluding office expenses) . Annas {	1-1 balf 2nd 5	0 21 025	0.39	0:26 0:27	0°29 0°22	0:20 0:21	0·23 0·23	0°1° 0°20	0.08	0°25 0°30	0°32 0°29
<b>147</b> <i>a</i>	Repairs and renowals of { combing vehicles	let half 2nd	1°31 123	2.50 1.53	1:60	195 093	1:05 1:14	1 19 1 Go		0·75 0·75	0·70 0 54	0.75 0.96
1480	Repairs and renewals of ( good vehicles )	1st half 2nd 5,	0.94 0.89	1770 2 (0	1.15	2°20 1.87	1 15 1 25	1.20 1.20	1·26 1·17	0.51 0.58	0·83 0·27	1·11 1·32
148A (")	Repairs and renewals of smachinery, tools and plant a	1st hal: 2nd ,,	0.09	0°23	0:63 0:63	0 07 0 10	0°11 0 11	0.11	0.01 0.02	0.00	0 27 0 11	0.03 0.04
140 <i>a</i>	Cleaning and oiling , , , , {	1 1 h d! 2nd	0°16 0°51	0 a1 0 50	0°27 0°20	0.24	0.47 0.49	0.37 0.38	0°31 0°32	0.33	0·34 0·33	0.28 0.58
150a	Other charges (net) , }	1st by f 2nd ,,	0:0G 0:0G	0.03	0°03 0°01	0.02 0.03	0 02 0 02	0.17 0.38	:::	9·02 0·02	0.01 0.00	0.01 0.01
15 <b>1</b> a	Total carriage and wagen sexpenses	1st helt 2ml ,	3°13 2°09	611	3 24 274	3.87 3.10	3:00 3:15	3 90 1 52		2·15 2·01	2:04 1:56	2:48 2:90
	PER 1,000 VEHICLE-MILES RUN BY HOME VEHICLES.											
146 <i>b</i>	General superintendence (includ- ing office expense)	1-t haif 2nd .,	0°17 0°53	0.91 0.29	0.90 0.92	0 14 0 48	0.84	9 64 0.72		0·25 0·25	0.77 1.03	1·08 0·99
1476	Repairs and renewals of ceaching vehicles calculated on coa-, }	1st half 2nd .,	13°53 11°65	15.67 11.30	11 00 9·40	9 00 7·52	10 67 10 20	10 19 13:96	7·05 6·17	6·76 6·36	6:91 4:55	5·89 7·37
1.484	ching volucie mileage. Repairs and renewels of goods { Yehreles calculated on goods , { Yohiele mileage.	1st half 2nd ,	2°74 2 44	9·48 7·61	8:05 6:45	6·99 5·62	5·23 7·05	7.03 8.81	4·09 3·41	4·43 8·78	1.93	6·84 7·73
148A (0)	Repairs and renewals of ma-	ist half 2nd .,	0 17 0 10	0.60 0.25	0.11	0.16 0.55	0.35 0.38	0·28 0·45	0.03 0.04	0.11 0.18	0.83 0.83	0.19 0.08
1498	Cleaning and orling " {	1st half 2nd ,,	0.09	1·17 1·27	0·92 1·01	0.23 0.22	1·48 1·69	1.05 1.28	0.25 0.25	1.08	1.13	0.89 0.04
1506	Other charges (not) , {	1st half 2nd "	0·12 0·13	6.00 0.08	0.01	0.06	0.08	1·10 1·85	:::	0·05 0·05	0·20 0·04	0.03
1518	Total carriage and wagon {	lst half 2nd ,,	6:36 6:36	14·26 12·05	11°57 9°87	8·70 14·46	9:43 11:26	11·18 11·58	6·02 5·28	6:20 6:20	6·24 5·97	8·51 9·74

DIX 18—continued.

system during each half-year of 1906-contd.

de not prepare these statistics.

			,		3'	3 <del>}</del> "	·· · · -		, t ··			,	2' 6"		GAUGE	:1
12 (a) (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (r)	(g) to (m)	20(a) & (b)	21 (a) to (4)	(a) to (i)	23 (a)	1 (b)	30 (a)	9 (h) &	1 (e)	Number	
lengal and Torth- Vest- crn.	Bhav- nagar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.		Jodh- pur- Bikanor	Rajput- nua- Mulwa.	Rohil- kund and Kumaon,	South Indian.	South- orn Mah- ratta,	Udai- pur- Chitor.	Jabbul- pore- tiondus exten- sion,	Kalka- Simla,	Khusha l- garh- Kohat- Thal and Now-hera Largai.	Rhipur Dhota- tari.		
KPEN	18E8-4	oncld,					 				•					
0·12 0·12	0°25 0°35	0°24 0°24	0.20	0:38	0·10 0 11	0·15 0·18	0·22 0·20	0·20 0 19	0·21 0·26	0.47 0.24	0:37 0:28	1·05 1·00	0.63 0.81	0 37 <b>0</b> :50	1st half 2nd ,,	} 138c
0·21 0·21	0·11 0·47	0.77	0.36 0.37	0.42	0.20 0.25	0·43 0·43	0 21 0 20	0·51 0·53	0.53 0.58	0.50 0.50	0:37 0:35	1·83 1·80	1·22 1·07	0.61 0.77	1st half 2nd ,,	}139o
0·52 0·54	1·19 1·08	1·03 1·02	0:61 0:74	0·41 0·43	1 30 1:32	1·02 1·11	1 10 0 70	0 95 1 01	0.82 0.83	1:46 1:51	0:44 0:15	6:53 7:88	1 95 1 74	0:31 0:39	1st half 2nd ,,	}1400
0.04	0.02 0.08	0·10 0 09	0.01 0.02	0:06 0:07	0·10 0·4 <b>3</b>	0 07 0 07	0.0% 9.0%	0.02 0.02	0·07 0·08	0.09	0·12 0·11	0.04 0.96	0:54 0:17	0·14 0·14	1st half 2nd	}141c
0.06 0.02	0 08 0 11	0 10 0:09	0.08 0.08	6.06 0.07	0·10 0·12	0.08 0.08	0.08	0 08 0 09	0 05	0.03	0 07 0:07	0.31	0.40	0·17 0·17	lst half 2nd	} 142c
0·27 0·29	0.70 0.70	0:46	1·12 0·43	0.52 0.10	0°37 0 43	0·71 0·67	0.15 0.35	1·52 1·13	0.68	0.43 0.43	0.30	1.94 2.06	1 3\$ 0 81	1:08 0:31	1st half 2nd ,,	}143e
0.01	0.03	0.05 0.05	0 07 0:08	0.01	0.62 0.62	0·10 0·12	0·05 0·04	0 03 0 05	0.07	0 05 0·16	0.03	0.07 70.0	0·11 0·08		I-t half 2nd ,,	} 143 } A(c)
0·19 0·21	0 18 0 06	0.37 0.50	0:50 0:11	0°25 0°29	0:24 0:40	0 19 0:17	0·22 0·12	0.01 0.10	0:39	::: :::	0 95 0 82	0 05 0°28	0·42 0 33	0.84 1.01	1st half 2nd ,,	}144c
1·12 1·47	3 07 5. td	2:95 3:23	2·98 2·04	1°S, 2°21	2:47 2:81	2:76 2:68	2·42 1·80	3:42 3:15	3 31 2.82	2·78 3 12	2 61 2:00	12 60 14/33	6 65 5 71	3 59 3 38	1-t half	}145c
183·48 178·51	176°5 ! 157 05	208 64 195 16	202:99 191:90	190·S5 199 00	200 32 20023	159°10 164°25		166.76 170.91	187·79 202·37	158:44 162:92	327/81 2°1/57	836:64 943:15	328:26 289:34	269-91 829-99	1st half 2nd ,,	
							575:25 451:80				:::				1st half 2nd ,.	
A GO	N EXP	ENSES	3.												·	
0.12	0.21	0·24 0·21	0.35	0·14 0·17	0·11 0·11	0.53	0.37	0.50	0:22 0:24	0:39	0·23 0 16	0·18 0·46	0 07 0:07	0·14 0·16	1st half	}116a
0.38 0.11	0:82 1:55	0·79 0·81	1.03	0.39 0:35	0 13 0 46	1:27 1:05	0:63 0:93	0.63 0.72	ı. 89 0:91	0:41 0:37	0.85 0.42	0·55 0·78	0·24 0·17	0.55 0.23	1st half 2nd ,	} {147.a
0 45 0·59	0:38 0:32	1:37 1:15	3 38 0·73	0 27	0 31	1:49 1:04	0.61 0.71	0:94 1:13	0 77 0 75	0 17 0 26	0.4; 0.31	0 06 0 95	0·19 0·20	0.09	let hålf 2nd	}148a
0.03	0.04 0.03	0.05 0.02	0.03	0.05	0.00 0.09	0·12 0·14	0 02 0:03	0 03 0 05	0.01	0:06 0:07	0.03 0.03		0 01		1st half 2nd ,,	118 118
0.30 0.38	0°21 0°24	0·26 0·25	0.30 0.30	0·16 0·20	0·18	0.27	0:34 0:38	0.31 0.31	0 16 0 18	0.20 0.48	0:35 0:37	0:31 0:30	0·41 0·33	0·26 0·21	1st half 2nd	} A(4) }149a
0·02 0·03	0.03	0.02 0.02	0.02 0.02		0.01	0.07	0.06	-0.01 -0.01	0.01 0.04		0.02 0.68		0.03 0.03	0·10 	1st holf	}150a
1:39 1:47	1.67 2.14	2 73 2·55	5·14 2·55	0.96 1.18	1·10 1·18	3:38 2:77	1:98 2:41	2·03 2·39	2 (9 2 16	1:53 1:58	1 49 1 34	1:40 2:19	1:25 0:81	1·14 0·81		}151a
0.34	0.55	n-65	1.05	0:46	0:30	0.50	0.75	0.00	0 62	0 98	0.50	3:45	%· 0:41	0:50	1-t half	
0.38	0·77 4·35	0.66 5.97	1:00	0·62 4·42	0.31	0·50 0·55	0.75	0.61	0.70	1.02	0.56 0.10	3 45	0.45	0.76	20d ,	1468
2·56 2·23	4.00	5:96 5:71	6.85	3 25 1 29	2 97	8·87 6·51	4·13 5·89	3.76 4.48	7·96 7·30	1.22 1.22	1.95 2.36	3:90 5:77	3·28 2·17	6.61 3.74 0.50	and ,	}1576
1.68 2.53	0.84 0.11	5.06 0.14	4.51	2.60	1:40	5·11 4·09	2:16 2:81	5:65 6:88	3·26 3 50	1·11 1·95	1.36 1.36	0·46 7·04	6.05 2.80	1.22	2nd ,	1488
0.07	6.05	0.50	0.07	0.07	0.11	0.20 0.83	0.02	0·10 0·15	0·11 0·12	0·16 0·17	0.06 0.05		0·07 0 01		2nd "	148 (b)
0.66 0.70	0·54 0·63 0·02	0.69 0.70 0.04	0.87 1.16	0·54 0·71 0·01	0·48 0·55	0.64	0·79 0·85	0.52 0.52	0.47	1·27 1·28	0.89 0.89	2·18 2·24	2.63	1.02 0.08	1st half 2nd ,, 1st half	}1106
0·04 0·07		0.04	0.15 0.23	0.01	0.01 0.03	0.03 0.03	0.01 0.13	-0.03 -0.50	0·13	0·01 	0·13	:::	0.31	0.03 0.35	2nd ,.	}1506
8°10 8'64	4·32 6·43	7:38 6:99	14·98 8·19	3·25 4·27	2·97 8·44	7·83 6·60	4·58 5·52	6·13 7·37	5·98 6·43	8·84 4·19	8·67 3·28	9·99 18·50	8·04 5·42	4·23 4·00	1st half 2nd "	<b>}</b> 1516

#### APPEN

## Analysis of working of each railway 7

Note.—Railways not shows

ı		GAUGE.						5′ 6″				1
.		Numbor	1 (a)	(n)·to (f)	3 (a)	(a) to (d)	5 (a) to (f)	6 (a) to(d)	8 (a) & (b)	9 (a)	10 (a) & (b)	11 (a
Scrial number.	Particulars.	Calon- dar year 1906 by half- years.	Bougal- Nagpur.	Bombay, Baroda	Eastern		Great Indiau Pouinsula.	Madras,	Nizam's Guaran- tord State.	North West- eru.	Oudh and	A saan Bongu
		•										
	PER TOTAL TRAIN-MILE.								7	rable í	D-TR	AFF
152a	General superintendence (includ-) ing office expenses) Annas		0 92 0 94	0.91 1.63	1:30 1:21	0.84 0.93	0.60	0:87 0:87	0.23 0.23	0·51 0·51	0.74 0.79	0.8
153a	Station stuff	1st half	2·28 2·26	3:31 3:31	6:36 7:34	2.85 3.25	2·00 2·25	2·23 2·23	1.65 1.93	2·18 2·37	2·55 2·55	2·8 3·8
15 <b>4</b> a	Train staff , , {	1st half	0°65 0 91	0 87 0 89	1°14 1°13	1·22 1·26	1.28 1.36	0·72 0·77	0.66 0.73	0.86 0.88	0.88	0.0
155a	Fuel, lighting, water and general stores ,	1st hal		0.95 0.89	1·18 0·95	0.81 0.70	0.67 0.82	0·54 0·47	0·12 0·46	0.57	0.56 0.21	0.
156a	Clothing ,, {	let half 2nd	1	0·12 0·09	0.00	0.07	0·07 0·07	0.10	0.10	0.04	0.19	0.
157a	Printing, stationery and tickets	1st hali	0·19 0·19	0·55 0·59	0·36 0·38	0.31	0.23 0.32	0.49 0.49	0.28 0.15	0·17 U 18	0·14 0·34	0
158a	Charges for delivery and collection of goods, etc	let hat	ı		0 02 0:02	0.01 0.01	0.01	0°02 0 61			0.02	
159a	Miscellaneous expenses	1-t hal 2ud ,	i	0.03	0·01 0 07	0.03 0.03	0.02	0.06	0.01	0.01	0 01	0.
160a	Payments to other lines . ,, }	1st bal 2nd	1	0°14 0 13		0.08	0.08 0.07	0.02 0.02	0.30	0.01	0 20 0 27	
161 <i>a</i>	Other charges (net), }	1st hal	1	0.01 0.01	0.01	0.01	0 02 0 05	0 07 0:05	0.01	0.03	0.01 0.02	ö
162 <i>a</i>	Total traffic expenses , {	lst half	5:74 5:94	6 91 6 96	10°48 11°17	6 22 6:72	5 61 5 53	5:33 5:10	3:91 1:41	\$ 41 4:71	5 (3 5 40	4:5:
•	PER CENT. ON TRAFFIC EARNINGS. (Abeliacts II and I of Revenue Accounts.)											
152 <i>b</i>	General superintendence (includ- ing office expenses) . Per end.		f 1°28 1°55	0·86 1·16	2°41 1 63	1·10 1·20	0.78 1 01	1.525 1.40	0.76 0.58	0.80 0.84	1°45 1 74	2 2
1535	Station staff ,	lst bal	3 17 3 73	3·17 3 80	11.75 9.88	3·73 4 47	3:00 3:50	3·21 3·60	2:36 2:86	3·70 4·08	5·04 5·61	6 7
1546	Train staff ,,	lst hal 2nd "	f 0.90 1.51	0.82 1.02	2·12 1·52	1·59 1·72	1.84 2:30	1.01 1.24	0.94 1.08	1.46 1.52	1·73 1·89	1
1556	Fuel, lighting, water and general stores	1st hal 2nd ,,	63:0 83:0	0:00 1:02	2·18 1·28	1.06 0.82	0 97 1 39	0·79 0·76	0.68	0 96 1 04		1
1565	Clothing ,,	1st hal 2nd ,	6.03 6.03		0.08	0.03			0.08 0.12	0.07 0.17	0:38 0:10	0
1576	Printing, stationery and tickets	1st hal 2nd "			0.67 0.21	0·41 0·49	0°31 0°51		0.49 0.23	0·29 0·31	0·29 0·75	0
1584	Charges for delivery and collection of goods, etc. ,,	1st hal 2nd .,	0.01		0.03	6.01 0.01	0.07		:::	0.01	0.03	::
1596	Miscollaneous expenses . ,,	1st hal 2nd .,	f 0.01 0.02	0.07 0.07	0.08 0.08	0·02 0·02	0.03	0.00	0.03	0 01 0 01	0.01	0
160 <i>b</i>	Payments to other lines . "	1st hal 2nd ,,			:::	0·10 0·10			0·43 0·61	0.07	0.60	] ::
1618	Other charges (not) . "	1st hal 2nd "		0.01	0.03	0.02 0.03	0·02 0 03			0.02	0.08	. ö
162 <i>b</i>	Total traffic expenses . "	1st hal 2nd "			19:38 15:02	8·13 9·15		7·71 8·22	5·59 6·53	7:48 8:12		13 18
	General superintendence per cent. on traffic earn- ings (including steam- boat) . Per cent.	1st hal	1 4.67			1·10 1·26	0.78 1.01	1·28 1·40	0·76 0·88			2 2

)IX 18-contd.

ystem during each half-year of 1906—contd.

o not prepare these statistics.

					8′ 84″								2' 6"		GAUGE.	1
12 (b)	14 (a)to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a)to(c)	2 (g) to (m)	(a) & (b)	21 (a)to ¶f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h )&(i)	1 (e)	Number.	i ii
Bengal and North- West- ern.	Bhav- nager- Gondal- June- gad-Por- bander.	Burms.	Eastern Bengal,	Hydera- bad-Go- davari Valley.	Jodh- pur- Bika- ner.	Raj- putana- Malwa.	Robil- kund and Kumson.	South indian.	South- oin Mah- ratta.	Udai- pur- Chitor.	Jubbul- pore- Gondia exten- sion,	Kalka- Simla.	Khushal- garh Ko- hat-Thal and Nov- shera- Durgai.	Raipur- Dham- tari.	by half- years.	Serial number.
XPEI	NBES.										•				. #	
0.80 0.28	0.87 0.89	0.81 0.86	1:00 1:00	0:63 u:79	0.28 0.28	0 50 0 59	0·70 0 76	0·78 0 69	0·52 0·59	1·75 1·65	1·26 1·19	1·62	0·19 0·48,	···	lst half 2nd "	} 152a
1.69 1.54	2·12 2 52	2·14 2·12	3 03 3 36	1·55 1·67	1·17 1·07	1.84 1.92	1.65 1.77	1·78 1·73	1.38 1.53	2 13 2 06	1.94 1.91	3°28	1 45 1 31	1·67 1·27	1st half 2nd ,	} 1584
0·14 0·44	0:42 0:49	0·70 0·72	0·76 0 79	0·61 0·73	0.55 0.55	0·48 0·51	0·34 0·38	0.45 0.42	0 49 0 53	0 :5 0 31	0 70 0 95	1·12 0·71	0 54 0 56	0:37 0:54	1st half 2nd ,,	154a
0·50 0·47	0·72 0·53	0·47 0·57	0.70 0.84	0·42 0·47	0·12 0·16	0·52 0·52	0·55 0·60	0·47 0 <del>1</del> 3	0.28 0.80	0°38 0 17	0·53 0·42	0·30 0·41	0·57 0 61	 0∵∪3	let half 2nd ,,	} 155a
0·06 0 05	0.09	0·07 0·12	0.04 0.02	0·05 0·13	0.02 0.02	0 07 0:05	0 00 0 06	0·14 0·05	0.49	0 07 0:04	0.03 0.03	0 18 0 03	0 12 0 05		16t half 2nd "	}156a
0·23 0·19	0.48 0.48	0·39 0·21	0:05 0:02	0·24 0·20	0°13 0°22	0 30 0 34	0°47 € 0 86	0°27 0°23	0·26	0.06 0.08	0·11 0·17	0°63 0°13	0·17 0 18	0.03 0.03	1.t half 2nd ,	1570
		0.03	<b></b>				••• •••					0.00 0.10			1st half 2nd ,	} 158a
0·03 0 05	0:03 0:03	0·02 0·03	0.01 0.01	0.02 0.02		0 01 0 02	0.03 0.03	0.01 0.01	0.03	0.03 0.04	0·01 0·01	0 03 4·56	0 01	0.01 0.01	lat half 2nd "	} 159a
0·10 0 <b>·0</b> 7	0 2 1 0 · 25			0·24. 0·48	0·24 0·45	0.08 0.08	0·24 <b>0</b> 26	0 07 0 07	0·17 0·21	0·37 J 36	0:65 0:57	0·24 0·15			1st half 2nd ,.	} 160a
-0.07 0.08	0.01 0.01	0.05	0.09 0.07	0 01 0 01	:::		···		0.03 0.03		0.03 0.03	0 01 (ro1	0.03 0.03	0 01	ist half 2nd "	} 161 <i>a</i>
3·56 3·49	4:97 5:10	4·71 4·62	6 07 6 4ni	2 77 4:70	2-78 3 07	3 80 4 03	4·02 4·22	8·97 8·62	3·18 3·51	5:61 4 99	5:00 4:88	7:39 11:48	3·?8 8 22	2·11 1·89	lst half 2nd ,,	}-162a
1 25 1 49	1·40 1·56	1·61 1 90	1·94 1·64	1·15 1·74	1·09 1·33	∩·R7 1·18	1:87 1:68	1:53 14:9	1·26 1·55	2·18 2 68	2.92 2.92	1·89 1·89	3°24 3°18	•••	1st half 2ud "	1526
3·63 3·81	3·89 4·07	8-99 4-96	5 36 5:39	2·85 4·11	2·21 2·0	3 17 3 24	3·22 8 95	3·48 3·70	3:31 4:02	2·65 3·33	4°50 5°50	3.47 3.81	* 9 675 8 75	4·69 5·18	let half 2nd ,,	} ·£88
0 95 1·68	0.66 0.85	1:81 1:69	1:34 1:27	1·13 1·60	0°41 0 50	0 82 1.03	0.60 0.85	0.88 0.81	1.18 1.41	0·32 0 49	1.63 2.87	1:85 0:83	8 63 8-77	1·03 2 22	1st half 2nd "	} 154 <i>6</i>
1.07 1.15	1·15 0·92	0°8 1:33	1·24 1 85	0·78 1·04	0 80 1.03	0.90 1.08	1·08 1·34	0.93	0.68 0.78	0·47 0·28	1·25 1·29	0:36 0:48	3·80 4·05	 0 <sup>-</sup> 11	1st half 2nd ,,	} 1558
0·13 0 13	0.15	0-14 0 28	0.07 0.09	0.09 0.29	0·04 0·11	0·11 0·11	0·12 0·15	0·26 0·11	0 22 0:09		0°08 0°24	0·22	0°84 0°36		1st half	} 15Gb
0·49 0 48	0·77 1·03	0·74 0·49	0.62 0.21	0·44 0·43	0.49 0.49	0·53 0·68	0.98 0.79	0·52 0·50	0-49 0-70	0.70 0.58	0.70 0.21	0.76 0.73	1·14 1·19	0.09 0.12	1st half	} 1876
***	:::	0.04 0.04			:::	:::		:::				0·12 0·10		:::	1st half 2nd	} 158 <i>b</i>
0·07 0·12	0.01 0.02	0.01 0.07	0.03	0.03 0.04	:::	0.04 0.04	0.08 0.08	0.03 0.03	0·05 0·07	0.04 0.06	0.03 0.03	0·03 5·32	0.07	0.04	1st bulf 2nd ,,	}1508
0-21 0-18	0·39 0 43	<b>3</b>	A	0 41 1 06	0 45 1.03	0·14 0·15	0:43 0:58	0·15 0·15	0·40 0·56	0 46 0:59	1·52 1·78	0·28 0 17		:::	1st half 2nd ,	}1605
-0·14 0·19	0.01 0.02	0.04 0.02	0°14 0°11	0 01	:::	0.01 0.01	0·01 0 01	:::	0·07 0·07	:::	0 05 0·11	0·01 0·01	0·21 0 17	0.08 0.08	1st half 2nd "	} 161&
7·66 8·61	7·96' 8·93	R-70 10-81		6:92 10:8 <b>3</b>	5·24 6·88	6:57 8:07	7:88 9:30	7·76 7 81	7·66 9·25	8.r8 6.88	12:81 16:19	8·8/1 13·37	22·17 21·81	5·99 7·75	1st half 2nd .,	}1625
1·16 1·46	1·40 1·86	1:61 1:89		1·15 1·74	1.09	0·87 1·18	1.87 1.68	1·58 1·40	1·96 1·55	2·18 2 68	2·92 8·62	1.89	** 24 ** 18		1st half	

APPEN

## Analysis of working of each railway

Note. - Railways not shown

,			<del></del>							OTE.~ R	anways i	not shown
		GAUGE		19 ( - ) 4		1 .	5′ 6″ 	10,	8	0()	T	
per.	Particulars.	Number	1 (a)	2 (n) to	3 (a)	(a) to(d)	5 (a) to (f)	6 (a) to (d)	(a) & (b)	9 (a) to (g)	(a) & (h	11 (a)
Seris number.		Calon- dur year 1906 by balf- years.	Bengal- Nagpur	Bom- buy, Baroda and Central India.	Enstern Bøhgal.	Eg t Indian.	Grout Indian Poninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Ondh and Rohil- khand,	Assam- Bengal.
<b>y</b>	PER TOTAL TRAIN-MILE.	•							TA	BLE E	-GEN	ERAL
<b>16</b> 3a	Home expenditure Annas	1st half 2nd ,,	0 67 0·78	0.68 0.68	0°12 	0:35 0:41	0.36	0:39 0:39	0:49 0:63	0.10	0.09	1 56 1 36
<b>1</b> 6\$a	Agent's office—salaries and expenses	1st half 2nd .	0·29 0·28	0°23 0°25	0:33 0:31	0 14 0:1	0·21 0·16	0.33 0.41	0 25 0 28	0·14 0·13	0 20 0 23	0.67 0.55
165a	Andit, accounts and pay office " {	1st half 2nd .,	0 70 0 70	0 93	0 83 0 82	0 46 0 49	0·54 0·59	0:72 0:69	1·07 1 i9	0.38 0.42	0.62 0 67	1·12 1·02
166a	Stores Department ,,	1st half 2nd .,	0 19 0·20	0.34 0.35	0°27 0°26	0.15 0.18	0 17 0 19	0·11 0·11	0 19 0 19	0·11 0·11	0·16 0·21	0.44 0.41
167a	Modicul ,,	1-t half	0°22 0°25	0·21 0·23	0 18 0·19	0·16 0·17	0·10 0·12	0·16 0·16	0.18	0 10	0·10 0·11	0.42 0.34
168a	Rents and miscellaneous . "	lat half 2025,	0 25 0 24	0 31 0 30	0 26 0 : 8	0°22 0 28	0.13	0·18	0:00 0.28	0 13 0 13	0·2: 0·21	0·15 0 14
<b>1</b> 69a	Police , {	1st half 2nd	0 20 0 22	0 43 0 14	0°17 0°22	0:24 0:25	0 32	0°°4 6°,5	0°16 0°33	013	0 1억 0 1년	. 0.25 0.31
1704	Advortising	ist half	0.00 0.05	0 01	0 04	0:01 0:07		0 °2 0 03	0 03	0.01	0·01	0:01
<b>17</b> 1 <i>a</i>	Electric telegraph , {	1st half 2nd "	0.85 0.97	1·18 1·27	0.51 0.86	0 76 0 78	0·73 0 76	0.8.4	0.54 0.61	0.64 0.66	0.60 0.74	1.16
172a	Other charges (net) ,, {	1st half 2nd .	0.01	-001	0.01	0 02 0 02	0.03	0.21 0.50		-0.01 0.03	0.01	0.01
<b>1</b> 73a	Total general charges , . ,, {	1st half 2nd "	3·40 3 70	4.26 4.41	3·13 3·09	2°01 2°75	2·46 2·61	3 10 3 12	3 46 8 93	1·89 1·70	2 24 2 35	5·78 5·29
	PER CENT ON TOTAL EARNINGS.											
1635	Home expanditure Per cent	1st half	0°91 1°23	0:63 0:77	0·21 	0·15 0·55	0·59 0 67	0°55 0°62	0.67 0.88	0.17	0.17	4·00 8·01
1646	Agent's office—salaries and expenses . , ,	1st half 2nd ,,	0:39 0:45	0·21 0·28	0·55 0 <b>4</b> 3	0·18 0·20	0.58 0.85	0 55 <b>0</b> 64	0 34 0 39	0·92 0 22	0·37 0 47	1·71 1·20
165h	Audit, accounts and pay office	1st half 2nd .,	0 94 1 11	0·83 1 04	1·41 1·12	0·59 0·66	0·77 0·08	1.01 1.07	1·47 1·67	0.64 0.21	1·15 1·37	2·87 2·25
1.60	Stores Department " {	1⊲t half 2nd "	0·25 0·32	0.32 0.40	0.45 0.85	0.20 0.21	0°24 0°32	0 15 0·17	0.38 0.50	0·18 0·18	0.29	1·12 0·89
1678	Modiorl ,, , ,, {	lat half 2nd .,	0·29) 0·11	0·20 0·25	0:31 0:25	0·2·1 0·22	0·15 0·19	0.23 0.25	0·22 0·26	0·17 0·16	0·19 0·23	1·07 0 76
1666	Rents and miscellaneous " {	1st half 2nd ,,	0:34 0:39	0·29 0 34	0:43 0:52	0 28 0 38	0·17 0·22	0·25 0 26	0·41 0·58	0·22 0·22	0·40 0·43	0.40 0.31
169%	Police " {	1st half 2nd ,	0.33 0.54	0 41 0:50	0.20 0.80	0·31 0·34	0.41 0.31	n·48 0 34	0.63 0.75	0·21 0·21	0·39 0 92	0.64
1703	Advortising . , . , {	1st half 2nd ,,	0 02 0 09	0.01	0.08	0·01 0·02	0 01 0 01	0.04	0.01 0.03	0.02 0.02	0·01 0·02	0.03
<b>1</b> 71 <i>6</i>	Electric telegraph ,, {	let half 2nd "	1 15 1 54	1.11	0 05 1 52 1 19	0.98 1.05	1 03 1 26	1·25 1·43	0·74 0·85	1 07 1 11	1·22 1·49	2·96 2·48
1725	Other charges (net) , , {	1st half 2nd "	0·01	-ö01	0.01 0.03	0.03 0.02	0·02 0 0:3	0.31	0.01	-0.07 0.04	0.01	0.03
<b>1</b> 796	Total general charges . , , {	1st half 2nd ,,	4·59 5·87	4:00 5:01	5·25 4·22	3·23 3 68	3·50 4·35	4·80 5·92	4·76 5·50	2·81 2·88	4·13 4·76	14·81 11·68
							<del>(</del>	,		142	F	
174	PER CENT ON GROSS EARNINGS. Law charges Per cent. {	1st half	0.03	0.01	0.08	0.03	0.04	0.10	38PE 005	CIAL A	M CM	18CEL
175	Companyation	2nd ',, 1st half	0.03	0 03	0 04	0.04	-0.03 0.14	0.08 0.11	0·02 0·02	0-17	0·10	0.10
176	Rates and town	2nd ,, 1st half	0·16	0 29	0·45 0·22	0 11 0·14	0·20	0·21 0·16	0.02	0.5	0.15	0·69 0·18
177	Danmonte to other there	2nd ,, lat half	0 22	0 12	0 14 0·24	0·14 0·90	0 21 0 5 4	0·23 0·28	0.58 0.08	0-11 0-19 0-21	0.08 0.08	0·12 0·53
. 178	Other changes (net)	2nd ,, let half	1.91	0·19 0·50	0·72 0·92	0 81 0 27	0 85 0 96	0.95	0 88 1 31	0.14	1.18	1.18
	**	2nd "	1.21	1.11	0 93	0.26	1.26	1 23	1.20	0 85	1-19	5.06
179	Total special and miscellaneous expenses , ,,	lst half 2nd "	3.81	1·42 1·74	2·47 2·28	1·41 1·36	1·79 2·50	1·94 2·68	1·46 1·87	1.88 1.88	3·18 3·18	5-91 7-10

DIX 18-contd.

system during each half-year of 1906-contd.

do not prepare these statistics.

-						3' 3	<b>3</b> "					T	2'	6"		GAUGE	.1
Í	12 (a) & (b)	14 (a) to (d)	15 (a)	5 (b) and (c)	8 (c)	13 (a) to (·)	2 (g to (m)	20 (4) & (b)	(a) to	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 h) &(i	1 (0)	Number	
	Bengal and North- West- eru.	Bhav- nagar- Goudal Juna- gad-Por- bandar.	Burms.	Eas- tern Ben- gul.	Hydera- bad-Go- davari Valley.	Jodh- per-Bi- kaner.	Raj- putana- Mulwa.	Robil- kund and Kumaon,	Houth Hadian	South- orn Mah- ratta.	Udais pur- Chitor,	Jubbul- pore- Gondia exten- sion,	Kat ka- timla.	Khushal- gorh- Kohat Taal and Novshera Durgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years.	1 =
	CHAR		0.62		0.0							•			No.		1
-	0 48 0 48	0.11	0 78		0.59 0.85		0 37 0:39	0 95 0 98	0.70 0.76	0 58 0 65		1 87 2 00	1 08		1 18 1 19	1st half	} 162a
	0·13 0·15	0.62 0.4 <b>5</b>	0·23 0 24		0 30 0·37	0·19 0·29	0 12 0 14	0°21 • 0°25	0 26	0 1 0 29	1 39 1 44	 	1 57	0 13		lat half	}168a
	0.62 0.63	1·15 1·15	0 58 0 59		1 31	0 14 0 45	0.23	0117 0 86	0 71	0 59 0 66	1 32 1 12	0.09	2:56	0 38 0 41	0 19 0 20	ist half 2nd ,,	} 165a
	0·08 0·10	0 81	0 19 0 19		0 23 0 28	0 00	0 18 0 18	0·13 0·7	0 20 0 19	0·17 0·19	0.13 0.14		02	0 11 0 11	•	lst half 2nd ,,	} 166a
	0.03 0.03	0·36 0 52	0°21 0°21		0·28 0·35	0.08 0.08	0·12 0·13	0.09	0 -1	0 14 0 17	0 23 0 24	0.20 0.20	0.60	ი∙იე 0 10		lst half 2nd ,	167a
	0·10 0 11	0.24 0.8	0 17 0 .6		0 31 0 39	0 11 0·12	0·17 0·18	0 31 0·3 :	0.19	(*13 0 17	0.85 0.20	0.07	0 14 0 45	0 12 0 .3	0 04	lat half 2nd ,	168a
	0·21 0·23	9:84 1:07	0.87 0.40		0 43 0 57	0.08	0 24	0.36	0 26	0 12	:::	0 10 0 11	0.39	0°45 0°35	0 80 0 43	Is half 2nd "	} 169a
	0.01 0.01	0 01	0 01 0 02		0:01 0:03	:::	0 10	0 02 0 03	0.01	. 0 01	:::		0 01 -	0 0! 0 u1		tst half 2nd "	170a
	0·48 0·61	1.03 1.22	0 67 0 70		0·60 -0 76	0 70 0 71	0.68 0.4	0 52 0 78	0.82	0 7 0 84	0 92 0 93	1:31 1:29	0 69	( ·6 ·	6 59 0:47	1st half	}17'a
	-0.07 -0.04	-0 01 -0 01	0.03		0°(1 0°01	·	::	:	0 02					- (* . j 0 0 .		1st half 2nd	1720
	2·22 2·34	4·71 5 79	3·10 8 27		4 07 5 22	·1 67 1 84	2 35 2 55	3 29 3 87	3 31	3 03 3 36	4 34 4 06	3 69 3 72	9 19 6 27	1 98 1 82	2:00 2:29	lst balf	} 178u
ŀ																	
	0 94 1·04	0 18 0 24	1·20 1·67		1.80	:::	0 63 0 77	1·77 2·03	1.25	1.68	:::	4 23 5 97	2 82 2 28	0 66	3 26 4 85	1st half 2nd "	1634
	0 26 0;34	0 99 1 28	0 43 0 54	gange.	0 53 0 50	0:35 0:63	0.21 0.28	0 44 0 52	0.0	0:57 0:76	1 70 2 28	:::	1 94 1 87	0 82 0 87	:::	1st half 2nd ,,	1515
	1·17 1 83	1·89 2·17	1.06 1.85	3,6	2 34 3 12	0 81 0 99	0 +8 1:04	1 21	1.13	1·10 1 71	1956 1978	0.50 0.52	3º12 2 67	2·51 2·73	0:5g 0:70	1st half 2nd 4	} 1658
	0·15 0·20	0·15 0·57	0 35 0 43	with the	0·41 0 60	0·17 0·23	0.40 0.83	0 24 0 85	0 40	0 .39 0:48	0°16 0°20	:::	0°56 0 22	0·70 0·74		1-t half	16.9
	0·19 0·20	0·56 0·87	0·37 0·43	led wi	0.10 0.75	0 11 0 18	0 20 0 26	0·17 0·24	0.46 0.45	0.34 0.44	0 27 0 38	0 57 0 59	0·70 0 47	0.60	:::	1st balt 2nd ,,	16.9
	0·19 0·24	0.38 0.64	0.35 0.35	Included	0·56 0·83	0 20 0 27	0.53 0.84	0.70	0 37 0 31	0.33 0.43	0 43 0:43	0:16 0:10	0 64 0 52	0.80 0.86	0.15		, 168A
	0:43 0:46	1 32 1 68	0.84		0.77 1.21	0.19	0·40 0·40	0·61 0 75	0·45 0 55	1 00 0.94	::	0 24 0 34	0 45 0 41	2.00	0 - 2	1st half 2nd ,,	- 1008
1	0 01 0·02	0·01 0·01	0.03 0.03		0·02 0·05	C·01	ö <sup>.</sup> 01	0 04 0.08	0.03	0.02	I	:::	0 04	0.09		1st half 2nd "	} } 170 <i>6</i>
	1·14 1·31	1 61 2 06	1 22 1 59		1.08 1.61	1·28 1 55	1·12 1·44	0 96 1 61	1.19	1 79 2·19	1·13 1 48	2·96 8 86	6:07 0 61	4 12 8 67	1 64	1st half 2nd ,,	}1716
	-0·14 -0·09	-0.01 0.01	0·04 0·07		0 03 0 03	:::	:::	:::	0.03	0·01 0·62	:::			-0 26 0.14	:::	1×t half	} 1726
Ì	4:94 8:05	7:40 9:81	5·69 7·44		7·29 11·10	3·07 4·04	4·00 5 04	6·11 8 00	6:35 5:79	7·20 8·69	5:81 6:44		10·84 9·53	18 07 12 01	6 36 9 32	1st hilf 2nd "	1736
1.	. A NI WI	OUS E	XDENIS	unie													
1	0.03	l l	0.04	, وباينو ,	0.01			0.01				¥	0.08			ist half	<b>)</b>
1	0.02	0.08	0.02		0.01	0 16	0·03 0·20	0·12 0 05	0.03	0.01	0.02	7 0·01	0.08	0.13	•••	2nd ,	}174
	0.04	0.08	0 18		0.02	0.16	0·80 0·11	0.12	0 01	0 10 0 00R		0.03	0 10	0 13		2nd ,	175
	0.50	0.08	0.08		0·51 0·16	1.36	0 12	0.01	0 22	0.08	1.04	°C·01 0·04	0 01	***	***	2nd ,,	} 176
	1 18	0·18 0·91	1:86		0 25	1·86 0·41	0·19 0·8#	-0·09 1·28	0.28	0.24	0·17 0·25	0.18	-0 67	9.60	0.60	let half	}17 <b>7</b>
	0.28	1.21	1 11		1 41	0.18	1.11	8 38	0.69	1 47	0.45	1.95	0.88	9·68 4·35	0.81	1st baif 2nd "	178
	0.83 1.50	1.01 1.70	2·02 1·32		0.94 8-19	1·98 2·46	1·42 1·75	1·29 \$·67	0°92 1°17	1 96 1 90	1 81 1 62	1·49 2·17	0 48 1 01	8·80 4·48	0.81 0.80	let balf 2nd ,,	179

#### APPEN

## Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

Nore.—Railways not shown

	-	GAUGE.					5′ G″					<del></del>
		Number	1 (a)	3 (a) to	3 (1)	1	5 (a) to (f)	6 (a) to	8	9(a)	10	11 (a)
ber.	PARTICULARS.			Bome (		(i) to (d)		·····	(a) & (h)	to (y).	(a) & (b)	
Serial number.	•	Calon- dar year 1906 by half years,	Bongal- Nag <sub>1</sub> ur.	hay, Baroda and Control India.	Eastern Beugal	East Indian.	Gment Indian Peninsula.		Nizam's Guaran- teo l State.	North West- ern.	Ondh and Robil- khand.	Assum- Bengal.
	FROM APPENDIX I			12.1.		· · ·						
		lst half	290	211	192	912	853	266	59	758	210	77
180	Average number of locomo- tives on the line No. }	2nd ,,	29)	217	198	929	870	276	59	813	198	87
101	*	1st half	69 53	59 87	61 1:	70 97	6+39	62.75	65:15	73:32	81.53	70.08
181	Average and string per loop Miles   Miles	2nd .,	68:33	5 1:31	72 61	67:16	53 17	¢0.13	57 33	72-41	82-23	71-13
	lbs, coal per engine mile (coal burn- ing engines) -	ist half		(46 93					C #1:0#	,		
182	Concling	2nd ,		48 15			•		30.25			
		1.1.1	55165	16 58	-5 17	31.56	50.00	50 32	52:08	45 38	48:60	35.17
1/3	Goods	2nd .,	51 16	1498)	6 64	50 : 7	50 0 )	50 85	50.91	18.17	45.27	40 81
		Let half		51 01					18.79			
184		2nd		L51 17	J		:		(48:50			
	lbs. wood per engine-mile (wood burning on ines)	<b>.</b>										
185	Conching 16.	1st hal 2nd .	l				***				"	
		lat hal										
183	Goods	2nd										
		1st hab										
187	Mixed	2nd ,		'								
	Average grees weight of tunns -	1st halt	1923 0	178 90	213-69	225-27	181:12	162 33	118-24	244.86	184-77	119-51
18-	Coacling Tons	2nd ,.	2:3 25	1751:9	227 20	°38 22	17F·53	149 0-	12611	241.03	175.09	137:10
		1st had	E FOT	(04:51	252 82	564 62	373:11	241 85	338:46	316 72	382-89	163:18
180	Grods (	2nd ,.	359551	59.107	256 5	561-17	352 11	411.44	318 37	315 59	318.01	218-46
19:	Mixed	1st. l alt	353-14	212 10	190 78	209-62		331 75	283.78	249 81	208-42	123-27
•	Average through speed of trues	2nd ,.	332.58	199 74	138 65	291 53		352-28	268.03	264 63	206.07	167-92
. 191	1	1.t half	i	22.96	19 07	12:00	23 45	21 85	22 (8	20 04	28:82	•••
	(	2nd ,.	29 21	23 90	19 7	27 0)	23 25	21 28	22.73	·20 C1	28.89	
) n:	Goods,	1st half	1	10 75	15 00	12 00	1" 49	11.40	9.50	11 11	10.64	
	į	20.1 ,	11:93	10 10	15 00	16.00	10 27	10 93	10.66	11.60	10 38	19:14
19	Mixed ,	1st hal	17:36 17:63	15:78 16:56	14.30	18.00	15:98 15:75	10.85	14.05	11:30	16.21	13.12
		2nd ,,	1700	10 0	14 00	17.10	. 10 (1)	10.00	1300		11 /4	10 12
	FROM APPENDIX II		l						ļ			
79	Average mileage per dient of	let hal	106,256	96,649	76,7-9	3-8,630	286,818	94,417	16,332	345,364	112,082	83,550
	conching vehicles, includ- ing trakes		112,926	1	79,474	323 458	293,822	95,326	13,793	366,769	109,036	36 272
•		1	: 296,707	1	78,125	1 083,810	603,577	206,690	53,236	652,525	156,882	46,641
19.	Goods dutto ditto ,,	2nd ,,	257,412	134,295	98,910	1,040,081	515,990	191,011	40,995	640,136	189,182	56,285
	FROM APPENDIX V.											
	Average age of sleepers -	let hal	6.06	9 78	8.60	9.67		5.69		8:11	11.89	
19	Wood Years	2nd ,	ı	9.84	1	8 83		5.90		8.30	12.29	-
		1st hal		13:91	11.20	9.51		82.98		12.08	14.95	
19	Iron	2nd "		13.91 14.35	11.20			33-22		12.38	15.88	
	Percentage of removals-	J,	f 2.08	8.76	4.28	2.71	5.66	9.94		2:68	₩ 0.52	<b>3</b> ·10
. 19	8 Wood Per cent.	lst hal 2nd,	1	3.79	1	8.03	4.86	4.50		2.73	0.31	8.23
		lst hal	i	1	0 24	1	1.03	0.33	"	5.45	4:57	
19	9 Iron "	2nd ,	1	0 41	1	2.38	1.50	0.21	1	3.02	1.01	
	1 - 52 - 1	1	I	1 52	1		1		ı	1	1	

DIX 18-concluded.

eystem during cach half-year of 1906-conold.

AS APPENDICES TO THE ANALYSIS.

do not prepare these statistics.

					3′ 34′	,							2'6'		GAUGE.	T
12 a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	2 (3) 10 (m)	20 (a) & (b)	21 (a)to (f	22 (n: to (j)	23 fa	1 (6)	31(1	1 ``	1 (e)	Number	Į į
North-	Ishavan gar-tion dal-Ju- nagad- Porban- dar.	Burma.	Pastern Bengal.	Hydera- b.d-do- davari Valley.	Jodh- pur- Bika- ner.	Rijpu- te na- Malwa.	Robil- ku d and Ku- maon,	South Indian.	South- ern Mah- ratta.	Udai- pur- Chitor	Jubbul pore- tendos exten sion,	biulk.	Khu-hal- gerh- kohat- Thal and Yow to re- Durgai.	R.ipar- Dham- tari.	Colendor year 1906 by holf- years	
235	29	247	152	£0	48	418	44	235	237	3	20	24	27	4	lst half	)
265	26	252	1:0	50	51	443	42	244	237	3	21	15	26	4	2nd ,,	} 180
71.43	72.05	C9 59	58-21	63.81	81.87	58.92	62.76	58:62	66.86	165 27	51:90	17:18	47 °0	43 75	lst half	} 191
62.46	61.57	68:43	64-49	50 60	73 16	15.51	61.05	57.62	59-25	•••	52.45	32.00	55.76	43:59	2nd ,,	} 131
			ſ	36.63	1									r	1st half	)
				84:35		<b>'4</b>							•		2nd ,	162
93·81	01.00	37:03	37.94	25.32	}40 ·17	36·G5		29 04	32-10	32 92	48:21	65.13	15:14	25:24 3	ist half	)
32.91	28·10	34.8	83.14	33.71	36.59	32 96	•••	20.75	32.77	29.85	47 23	39.0	14:02	21.67	2nd "	163
32.51	20 10			33.16			•••	20,10	0271		1, 20		2202	3.0.	]rthdf	184
			ا	83.09	J									ij	2nd ,,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
					<b>.</b>	797	ر ،		ر ا	١					1st half	,
															2nd "	185
				`			200		31.72						1st half	)
							91:01	.5**	12.61	.					2nd ,,	186
															let half	)
							1 1	🛶	t	۱				]	2nd	} 187
173 78	94.71	142-9:	111 53	*.:*81	123 07	118 93		96:37	81.56			1.31	22.58		1-t balf	) 100
170.97	101 97	147/41	142 0	*47 00	21 69	112.06		87-69	7 '' 13	٠		50 0	16.63		2nd ,	188
200.15	189 98	189'64	. 20.03	156 99	80 35	2 '0 01		166-60	197/25		1-0.26	20 05	35 65	99:4:.	l-thal.	) <sub>189</sub> ,
196 63	198 21	179-46	211-22	1.1.43	107:15	257 47		108 63	174.80		13642	50 (0	18:26	59 (4	2nd "	} 100
186.88	116 79	177 2	151/2)	158 85	11141	136.53		162 30	161 2)	182- 9	176 32		93 62	81 77	1-t half	} 193
178.18	131 49	176.52	15.)*41	143776	106 80	131 05		1 (3:20)	16 0'1	155 67	170 %		48.78	67 62	2nd .,	}
17.00	20 65	18 75	19.25			17.97		15 00	18 0.5	٠ ا		10.00			let half	} 191
17:00	20.65	18.75 10.0	19 25 11 16	11 01	10:00	17 05	:8 10	18 00	15:15			10.00	9.7.	·"	2nd ,	)
9.50	11·26	9.71	11 16	11.01	10.73	9.13	9.99	9.50	7 27		9 69	10 00 10 <b>0</b> 0	8:7: 8:83		1 t half 2nd ,	193
12.50	13.62	12.85	15 00	13 05	10:72	14.11	13:55	12 00	12 35	 11 76	11 33		9.71	10:37	let half	,
12:20	18.62	13.13	15.00	13::2	13 92	11 38	13:33	12:00	12 32	14 76	11 33		9.68	10 21	2nd ,	193
117,591	22,539	116,997	68,223	15,864	32 161	203,199	20,702	129,207	98,188	2 492	9,112	1,580	4,950	871	lst half	104
144,562		117,861	70 467	15,241	33,872	-16,480	22,533		94,970	2,197	5 119	1,723	5,823	781	2nd	} '··*
220,075	23,191	211 087	85,845	37.001	<b>5</b> 0 (85	422,013	27,100		:06 374	1,547	11.531		5,365	1,939	let b: If	195
219,301	18,651	199 9:1	81,797	27,816	41,377	341,584	21 185	141,291	160,581	1 01∴	6.573	1,679	5,281	1,341	ond ,,	)
																_
8.86	12.97	11:58	11 <b>0</b> 0	، ر	١	8.00	10:79	12.64	11.0		2 45		4.17	6 27	lat half	)
9.48	13.16	11 74	10-50	]	12 50	8.20	10:85	12.78	11 00			į	4.59		. Lud .,	196
	15 96	10.31	14.50	j	13 00	19 50		1691	18:00				3.87		1st half	)
	16.45	10.85	14 00	\	إ	20.00	•••	17-11	18-50				4.22		2nd ,,	} 197
	4.51	8 35	A 815	r	1	3:41		4.83	2.49	]			0.31	1.62	1st half	•
1.70	2.38	2.44	2 71		0.09	8-26	9.88	2.16	3.22				0.36		"nd .	198
	0.17		0.28		0.12	***		* 0.15	1 28				4.17		1st half	)
	0.05		0.47	(		0.21	***	6.06	2.39						2n i ,,	{ 109

Rolling-stock under different heads on each

Marie   Mari	-							9	<u> </u>		<u> </u>					0.0						<b>.</b>
No.   No.	٠].	GAUGE.	- / 7 .			<b>-</b> ,-	8′ 6″ 	···	<del></del> ,					•		2. 3	r"			<del></del>		
Page   Page		Number,	1 (a)	2 (a) to (f)	3 (4)			6 (a) to (d)		9 (a) to (y)	10(a) & (b)	11		Ši.		(a)	16	17 (a) & (b)	3 (b) & (r)	(c)	(a) to	
Page   Page	items.	Railway.	B N.	H B.	E.B.S			М.	9.0.8	N. W	).&R.	A.B.	B. & N. W		B.G. J.P.	В.	D.	D. 8.	E. B. S.M.	H. Q. V.	J. B.	
Negless   Processor   17   18   18   18   18   18   18   18		Engines,																			1	
Torse Resulters		(Passenger	77	88	71	158	7	( 54	5	)	ς G5	)	<b>( 45</b>	)			<b>)</b> -		ر 68 ا	7	1	
Toyal Eventree   Per	1	Engines 4	214	182	l	788	3862	218	56	<b>}</b> 820	110	} 81	1.5	510	37	231	32	26	₹ 82	<b>}</b> 55	48	
Salaons, Royal and State	2	TOTAL ENGINES	291	220		946	862	272	61	820	2:5	87	271	10	37	259	2	26	1:0	55	48	
## Saloosa, continery		Coaching vehicles,									İ										- 1	
Becorros descripage   16	8	Saloons, Royal and State				4		2	14	8		4	3			2			3	8	3	
Baspection corruspees	4	Saloons, ordinary	2	13	18								13	4	2	9			18		1	
Pauli carriages	5	Reserved carriages	16	9	2	43	7	12	ß	65	23		4		7	80		'		8	]	
First clave carriages	б	Inspection carriages	1				1	9			1	8		1			١.				5	•
Print clave carriagnes   Carboaled   26   25   35   67   92   35   08   24   00   00   00   00   00   00   00	7	Family carriages				J.	8	4	2		2	-::			5	1						
Dindage ons	8	First class carriages	26	1	15	1	Į.	39	ł	82	40		40	İ	8	27				8	7	
Compositio, first and [4-wheeled]		(Bogie		1		3	6		9	j	1	1	1	2					4			
10   Composite, first and   Revise	9	Dining oars	1	i	1	1	1	ł	1		1	1		1		1		1	1		4	
Second class   Chapte   2   23   12   29   18	10		i	1	1	61	87	68	12	1		1	1	1	1	38		10	1	11	20	
11   Composito, first, see,   Composito carriages   5   3   24   63   5   3   31   10       5   5   5   3     3		second class. ( Bogio				1	1	1	1					6		-	1		İ		"	
Second class   Ductic	11	Composite, first, se- {	1				1	1		ł		1.4		1	1	1		i				
13   Second class	12	Other composite carriages	5	1	24	6.5		3		31	10				3	11	2		1		3	
daton.	13	Second class \	í	1		1	1	1	1	91	1	1	1	1	ı	İ		1	1	1 1	6	
15   Intermediate class   Ambulance	14	dation.	l	1	1	1	22	1		1	1		1		1				i i			
Bogio   12		ì	l				1	1	1	ĺ	1	1	ļ	1			1	1	i	1	17	
16 Composite, interardante and third 15 . 88 37 . 7 . 89 31 70 1	15	i		1	1			1		1		1	1		1		"	"	ł			
17   Intermediate and postal carriages   3   5   6			ı		1			i	1		1		1		1				1			
18 Intermedicate, third, and postal 1 3		class	Į.	i	1		1	-		1		1			1	1		"	ı		3	
19   Lower class			1		1			1	1			1			1		.	"		1		
4-wheeled		Carriages	l				1	1		1				1 3	1			""	}			€
20 Third class corrispest Bogio 81 27 140 67 9 6 22 10 162 89 3 20 without brakes. Ambulance 15 92 16 57 174	13		ŀ	11.3	1	1	1	1	1	1	1	•	1		i	1	1	1				
without brakes.       Ambulance       15       92       16       57       174         55 <th>00</th> <th>i</th> <th>l</th> <th>1</th> <th>1</th> <th>1</th> <th>1</th> <th>i</th> <th></th> <th>1</th> <th>1</th> <th></th> <th>1</th> <th>1</th> <th></th> <th>1 .</th> <th>1</th> <th></th> <th>1</th> <th>1</th> <th></th> <th></th>	00	i	l	1	1	1	1	i		1	1		1	1		1 .	1		1	1		
21       Third class and postal vans       14       13       3       51       24       12       5       52       33       16       19        4       80        8       4       10         20       Third class carriages       Bogin       61       20        88       33         266       26       66       48        37              22         263       207	20	without brakes.	i	1	ĺ	1	1	1		1		1				1	1	1		ľ	20	
Third class entringes   Sogie   St   20     28   33     265   26   66   48     37       5     28   Brake-vans   Bogie   St   20     38   33     265   26   66   48     37           5	41	A4 N	1	1	}	1	1	1	1	1		1	1	1		1	"	""	1			
Third class carriages   Bagia   Store, ice and specimens   Store, ice and s	S.						1		"	1			1 "	1	1	1		""		1	10	
With brakes,	90	<b>.</b>	1			1	ì	1	"	1		1	1			1		1			- 1	
28 Brake-vans with third closs	20	with brakes.	1				1	1			1		1		1		1	1	1		- 1	
24 Brake-vans with third class 81 25 13 42 99 7 65 43	09		1		1		1		1		1	1	1	1	1	1			ł	1		
25 Brake-vans fitted with postal comparison of the perfection of the perfection of the perfect o			i		1	į	1	i i		1	1	1			1		1		1	1		
26 Fostal vaus							1	i			1	1						1		ı		
28 Prieon vans		partmont.	1		1	l		1			1	1	1	ĺ		1			1			
29 Carriage trucks 6 7 39 55 27 2 42 5 6 1 5 5 5	27	Composite, postal and other carriage					11														nn	
80 Horso boxus 16 ,18 20 75 114 56 10 142 43 16 30 1 5 37 8 10 10 12 31 Luggago vans 31 26 26 48 115 40 6 61 43 12 1 23 4 10 32 Produce Vendors' vans 16 10	28	Prison vans					8						<u> </u>			3			4			
31 Luggago vans 31 26 26 49 115 40 6 61 43 12 1 28 4 10 32 Produce Vendors' vans 16 10	29	Carriage trucks	1 .	6	7	39	55	27	2	42			5		6	1			5			
32 Produce Vendors' vans	80	Horse boxes	16	, ,28	20	1		56	10	142	43	10		1	5	87		8	10	10	12	•
33 Milk vens	31	Luggage vans	31	26	26	49	115	40	6	61	43	12	1			23	· · · ·	4	10			
34 Fish vans	32	Produce Vendors' vans			16	10												•••				
85 Store, ice and stylionery vens	33	Milk vens			23							1	l l	-	-		1		1		] [	
36 Miscellanceus 11 9 2 4 1 23 2 13	84	Fish vans			31							1	3		.			2	23	•••	-	
	85	Store, ice and stationary vans				1				}	1		1	-	.	1	1		1			i
37 TOTAL COACHING VEHICLES 956 616 719 2.495 2.375 1,129 189 2,552 860 266 1,129 63 255 1,038 12 89 661 164 217	36	Miscellaneeus	111		9	"				9	-							8	13		"	
	<b>87</b>	TOTAL COACHING VEHICLES	956	GIA	718	2,495	2,375	1,129	189	2,552	860	260	1,12	6	950	1,088	12	89	661	164	217	· .

DIX 22.
railway at close of the calendar year 1906.

			3' 31'	,			1							6"									1		2'	0"			1
19	6 (e)	2 (g)	(a)	21 (a)	22 (a) to	23	24	25	26	27	3 (6)	2 (n)	1 (b)	30	9 (h)	6 (g)	19	1	1 (d)	20 (c)	32	33	9	85	5	86	87	38	Item
7	(J)	(m)	(6) R. &	S. I.	( <i>j</i> )	g.	B.	В.	В.		. (d) E.1:	(o) Q.	(e)	K	(i) K. K.	& (h) M.D	M.	(c)		P. W.	В.	7	D.	D. H.	(g)	H	H.	-	
	N.& 8.0	R.M.	K.	5. 1,	ъ. м.	٥.	B, L	L	B.	O.	S.N.	D. & R.	E.A. R.D.	S.	N. D	T.K	W.	B.	Ľ.	W.	] P.	В.	L.	Н.	L.	A.	8.	J.	
3	}18	{ 145 303	} 48	${83 \atop 165}$	43 195	1 2	} 3	7	3 •	3	{ 2 13	} 11	{ 6 23	}24	30	6	{4 {1	}3	3	5	5	3	7	17	15	1,	4	7	
5	18	418	18	218	237	3	3	7	3	3	15	11	29	24	80	6	5	3	3	5	5	3	7	17	15	11	4	7	
													-																
	1	5		3	6						"; 2						3		1					3	2		:::   		
		*	4		12		1	1					2	4	3											1			
-		13	2	14					.											1	1				1				
ļ				3		1						,								1									
		108	6	15	44				1	1		1		12	3			2						18				-	2
	2		6									6		1			6					]		1	4			].	3
-		8	2	1	6															:									
	1	48	8	40	54	3	2		1		6		2	4	8		4			3	2			5		3			2
-	2	34	6	3	12									4		4				.									5
1																						-							}
1	2			42						٠												3	1					6	5
ļ		10		9				4			9		6					2	1		1	2			2	4	2	2	
1													, ···	1		•••						-						2 ]	2
1		87	6	28	37	1								10			4							23	3		•••	3	)
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		51	8			2	1		2		2		•••			1					1	-				•••	{	[]	
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		•••									•••			•••				•••					-						ļ
		15	10								2	٠			5					•••	2					3	2		
		12			•••						•••	•••	•••		•••		•••				"	1	***		"	**	"	"	
		•••	6		•••		ŀ							•••			•••				"	۱.		]					
			"				••						••			•••		*-	3		:.	7		;;			;;	11	. 9
•		509	49	511	210	11	15	2	11		25	6	14		22		15			10	11	"		41	"	58	14		
	26	200	26		53			21	•••	1	•••	22	•••		•••	10	18	8	-		"	"			28	"	"	·	
		5	20	15	1		Π,							•••	•••							"	"	"	- 1		"	"	
	•••	82	2	28	39	1	1		1		2	•••	"				2				3	1	I	"	14			"	. '
•	•••	08	8	1.10	237	8		2			•••	•••	111	80 8	9 6	"					- 1	"					- 1		-
•		47		146	19								82								- 1							]	
	10	976	14	 84	45	8				1	7	11	 3	18	11		6		3						4	7	1		
	4		2	45	180		3				7		15	:	1	7				4	1				6	2	1		
•			28	6														2				3							4
				`			<u> </u>						\											8					
	3																2												
•		5			6														.										
•	8	98		5	14											•••													
2	8	82	10	30	47	1						2	2				2								5				
		27		81	23							<b></b>			8		<b></b>	.										-	
•																													
		,,			١٠														۸.									3	
		1		10	10						1				6							•••		8	2				
	1	1	1	l	1	1	11	L	1_	1	L	1		1		J			L		_		l						`

APPEN .

Rolling-stock under different heads on each :

-	GAUGE.				·	5′ 6″		₹			<u> </u>				34" W'DE					-1
	GAUGE.						i					ı	13	Γ	( · · )	ı —	}			18
	Number.	1 (a)	2 (a) to (f)	3 (a)	4 (a) (o :d)	5 (a) to (f)	6 (a) 10 (d)	8 (a) & (b)	9 (a) to (y)	1º(a) &(b)	11	12(a)	(a)	14(a) to (d)	15(a)	16	17(a) &(b)	3(b)	8 (c)	(0,00)
rtem.	Railway.	B. N.	B.B &C.I.	E.B.S	Е. 1.	(1. I.P. & l. M.	М.	N_G.≺.	N. W.	0,&R	A. B	B & N. W.	В D.	B. G. J. P.	В.	D 	D.S.	E. B.	H. V.	J B.
	Goods pehicles.																			1
88	Covered goods wa Ordinary . Military .								474	2,151 2,73.	100	200		 	625 75		 			6
39	Covered goods was Military .	2,408 1,278	1,513	1,994	₹,391 	7,6-6	928 1,917	59 102	2,507 6,195	 		5,810 	263	145	2,760 20		2.3	1	403 100	616
40	High-sided wag, us, bogio					:0		19	•••		25	•••			16				2	
41	High-sided wagons, 4 wheeled .	l	1,003	1	2,110	3,578	1,320	799	1,112		1.7				G :		744		277	
42	Medium-sided wagons, bogie	•••	-		•••	٠.									310			₩		
43	Medium-sided wagons, 4-wheeled .	290	443		•••	l										6				
44	Low-sided wagons, Military .		95						102	16 374					115					152
45	Low-sided wagons,	190	102	109	6,675	205		•••	351		300	467	66	565			70	235		143
_	4-whoeled. (Military	156	● R5	367	▼		229		1,841						186			228		
46	Coal or coke wayons	2,993	100		1,357		30		•••	110										
47	Catilo wagous			1	7		1		21		4			6	160					35
48	Accident vans	14	14	13	20	39	18		•••		5		1		14			8		
49	Platform wagons				4.1		3					2						3		-
50	Powder vaus	6	G	5	:3:	24	9		50	۶	8	1		2	!2		1	2		1
51	Timber trucks	36	20	16		191	- 215	:0	49		35	279	11	23	95		51	114	20	
52	Bolstor trucks $\begin{cases} \text{Don}^{\text{t}} \text{-le} : \\ \text{Single} : \end{cases}$	 14		78		 50			271		 16			 	117 150		 			:-: 
53	Ballast wagons	76	450	20		1:6	1:0	64			50			71	: 40			50	83	
14	Travelling oil tanks	31	20	28	69	51	45		51	12	3	G		ä	2			16	1	
55	Travelling water ranks		25	8		11	10	a	72	1				1	23				1	10
86	Travelling gas holders	- 5	8	2	3	17	12	2	15	8	8							4	2	
57	Travelling cranes	11	4	7	េះ	57	15	2	52	17	15	19	3	?	30		2	13	2	
84	Miccellancous	31	8	16	8	1	16	7	16	7	12	9	1	50	98			02	6	•••
<b>5</b> 9	TOTAL GOODS VEHICLES .	7,632	5,130	4 059	07 8	12,166	1,918	1,058	2,812	5,583	2,016	0,021	4	1,0:8	5,260	. 10	1,01	3,776	897	592
		•	l	,		,		(		•	1	rc.	vei Vei	CL/	768 C	ı AR	RIAG	 }ES F	ן יניביזי	ED
	Intermediate class		18	7	14									11						20
	Composite, intermediate & 3rd eless.		1	19	5.0	•••	•••						"	•••	5		•••	22		24
	Third class	40	91	4	256	100	F1			19	19		3	39	52					88
<b>6</b> n_	Тотаь .	40	112	30	3:0	100	81			19	19		3	53	57	-		22		152
				!	ı	1		I,OW	ER C	CLAS	S CA	RRIA	GE	8 PR	OVII	) FID	WIT	H LA	LTR	INE
	Intermediate class	26	18	14	6.		4		1:3	37	45		3	13		-	-	45		20
	Composite, intermediate & 3rd class.	34	1	31	60	57	64		96	21					33			40		24
	Third class	69	94	72	274	114	94	64	5/2	191	44		з	39	72		13	257	68	68
61	Total .	129	113	117	398	171	162	64	791	219	89		6	53	105	-	13	342	68	192
																	1			

DIX 22—concld.
railway at close of the calendar year 1906.

		,	3' 83"				<u> </u>							2' 6"					····				Ļ			2' 0"	,		1
19	6(e)	2 (g) to (m)	20(a) & (b)	21(a) to (f)	22(a) to (j)	23	24	25	26	27	3 (b) & (d)	2 (12) & (0)	1 (b) & (e)	30	9 (h) & (i)	(q) & (h)	19	1 (c)	1 (1)	20 ,c)	32	32	9 (5)	85	5 (g)	88	37	38	Iton
1. 3.	N & S.C	В. М.	R.A K	9. I.	S.M.	U.	B. B L.	B. L.	В. В	C.	E.B. S.N.	G. D. & R.	H. A. B.D.	K.	K K T. & N D	M.D	M. R W.	М. В.	L.	P. W.	B. P.	T. B.	D.	D.	G. L.	H. A.	H. 8.	3.	,
																									ğ				
••	75	471	345	75	85			27					150	20	49	24	10	3	2	1								43	}
9		3,579	76 <b>9</b>	2,055	3,526	25	6		14		103	 \$8	20	79	25		10	2		57	20	30		19		14	4		, >
		1,101		260	193																				80				}
5	49			22	57			5	2		₩.				13	24	9								2	10		23	
5		131		789	170				6	11				25	19				. ]			12		184	43	4	4		
•••	6																-	A											
••		150			140	.				•••								2								**			
•••		237	30	20				59		4		96	50				38		12									4	}
••	7	953			100				10	***					14			"				"	• ***			"		-	,
•••		13	143		438	10	19		12		40	73	30	30	<b>4</b> <b>6</b> 9		•		2	8	21	8		7	10	•	***	3	Į.
••		1,200	•		350			•••					65	•••	69		"	"					326	"		"	""	"	,
••			•••	6	28		l				•••				10						"	- 1	1	"	"	"			
1		16			13																				1				
				4	45						1			1	7							2							
	1	35	2	7	13							1		1	2														
	8	79	76	33	127						24		23	4						2				6				5	
••				38	30						110																		)
••					65																				1				5
•••	22			522				3							150			-		-					100				
•••	4	21		24	8	• • •							2											•					
•••			•••	23	8						3						1							•••					
•••	1								1											••									
					25			١.		1	l				1	1								1	1 0	44			
•••		27	10	8	21			1						1				- 17											
	i	1		l	1			١.		1		2		1			 			 8				 8				 	
		27	10	8	21		ŀ	1			l	}		1	1	'		 18						8					
70	171	27 1	1,361	3,891	21 20 5,362	35	25					2				-				8				8		-			
70	171	9,007	1,361	3,891	21 20 5,362	35 AL1	25		34			2	310	161		48	68	12	16	71	41	50	326	254	237	32			
70	   171 	9,007 CLOS	10  1,861	8 5 3,891 FOR	5,362 FEM	35 ALI	25 ES.	94	34	18	280	210	310	161	431	48	68	12	16	71	41	50	326	254	237	32	8	78	
70	171 — — — — —	9,007 CLOS	10  1,361 BETS	3,891 FOR	5,362 FEM	35 AJ.1 2	25   	94	34	18	280	210	310	161	431	48	68	12 3	16	71	41	50	326	254	237	32	8	78	
 	   171 	9,007 CLOS	10  1,861	8 5 3,891 FOR	5,362 FEM	35 AJ.I	25   	94	34	18	280	210	310	161	431	48	68	12 3	16	71	41	50	326	254	237	32	8	78	
 	171 — — — — —	9,007 CLOS	10  1,361 BETS	3,891 FOR	5,362 <b>FEM</b> 68	35 ALJ 2 	25   	94	34	18	280	210	310	161	431	48	68	12 3	16	71	41	50	326	254	237	32	8	78	
70	171 171 22	27 1 1 9,107 CLOS	10 1,381 16 29 45	8 5 3,491 55 55	5,362  b.EM   68	35 AJJ 2 15 17	25 25 	94	34	18	280	210	310	161	431		68	12	16	71	41	50	326	254	237	32	8	78	
70	171 171 22	27 1 	10 1,361 16 29 45	8 5 3,491 55 55	5,362  b.EM   68	35 AJJ 2 15 17	25 ES	94	34	18	280	210	310	161	431		68 	12 ±	16	71	41	 50	326	254 	237	32	8	78	
70	171 171 22	27 1 1 	10   1,881     16   29   45   DATI	8 5 3,491	5,362  FEM   63  63	35 ALJ	25 ES	94	34 	18	280	2 210	310	   	431 TED	48	68 	12	16	71		 50	326 	254 	237 	32	8	78	
70	171 TB 22 22 22 5	27 1 1 	10   1,881     16   29   45   DATI	8 5 3,491	5,362  FEM   63  63  INCL   121	35 ALJ 2 15 17 DD 2	25 ES.	94	34 	18	280	2 210	310	 161	431 TED	48	68 	12 3:	16	71	41	50	326	254 	237 	32	8	78	
770	171 171 22 22 22 22 22	27 1 9,007    MMO 51 81	10 1,381 16 29 16 29	8 5 3,491 FOR 55 55 117 26 117	5,362 FEM 63 63 1NOL 121	35 ALJI 2 15 TUD:	25	94	34 	18	280	2 210	sio	 161	#31 #31 #31 #31 #31 #31 #31 #31 #31 #31	48 WI?	68 	12	16	71	41	 50	326 	254	237 	32	8	76	
70	171 171 22 22 22 22 22	27 1 9,007    MMO 51 81	10   1,881     16   29   45     16     16	8 5 3,491 FOR 55 55 117 26 117	5,362 FEM 63 63 1NOL 121	35 ALJI 2 15 TUD:	25 ES	94	34 	18	280	2 210	310	 161	#31 #31 #31 #31 #31 #31 #31 #31 #31 #31	48		12 3:	16	71	41	50	326 	254 	237 	32	8	76	

,	GAUGE				5"	6'		
6 No.	Number.	1 (a).	2 (a) to (f).	3 (n).	(a) to (d)	5 (a) to (f).	6 (a) to (d).	8 (a) & (b).
Progressiv	Particulars.	B. N.	B. B. & C. I.	E, B, S,	E I.	G. I. P.	м.	N. G S.

### ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

20 21 22 23 24 25 26 27 28 29	Number at close of 1905 Number added in 1906 Number at close of 1906 Number at close of 1906   2nd class   2nd class   3rd class   3rd class   4nd there is class   4nd there is class   4nd the class   4nd class		911 45 956 956 0 04 0 03 0 02 0 26 0 19 0 54 38,341 49 973 72 023 42,797 38,182 42; 93	634 12 646 0.05 0.07 0.07 0.03 0.27 0.78 	712 7 719 0 13 0 1 : 0 : 6 0 : 60 0 : 45 1 : 44 95 807 46 : 49 48 : 29 47 : 581 30   512 41   308	2,375 120 2,495 0 08 0 05 0 06 0 43 0 41 1 0 0 62,577 77 489 87 635 07,550 36,063 56 209	2,258 87 2,375 0 07 0 08 0 31 0 34 0 84 03,403 55,060 63 141 24,324 44,6 2	1,312 17 1,229 0°:7 0 08 0 01 0 39 0 29 0 84 20,406 80,103 51,446 37,295 31 731 34,191	188 1 189 0 11 0 65  0 19 0 19 0 54 
81 22 33 34 35 36 37 38	each per annum. 3rd class. All other classes .	 	38,182		30,512	36,063	24.324	37,295 31 731	•••

43 44 45	Number at close of 1905  Timber trucks, including belstof trucks all other classes.  I Total of all classes  Covered wagons.  Covered wagons.  Covered wagons.  Covered wagons.  Timber trucks, including belster trucks.  All other classes.  Covered wagons.  Covered wagons.  Covered wagons.  Open  Number at close of 1906  Timber trucks, including belster trucks.  All other classes.  Covered wagons.  Open  Number of all classes per mile of line open.  Average mileage run by each per annum.  Average mileage run by each per annum.  Average carrying capa-  Covered wagons.  Open  Average carrying capa-  Open  Average load of a goods which, loaded and empty, per mile  Freight ton-mileage per vehicle, in thousands of tons.  Average under repairs or renewals at any one time.  Total value, in thousands of runees.  Total value per mile of line open.	3,776 3,172 81 7,879 253 253 3,776 3,725 50 60 7,632 431 18,889 631 15-07 16:99 7-11 89 236 2.17,29 12,883	2,717 2,251 2,27 5,105 27 	3,315 509 125 104 4,033 61 -25 6 6 3,378 483 90 910 4,059 8115 7,00 7,43 13,05 1,595 7,85 2,24 	8,248 9,032 17,495 143 1,110  1,280 8,391 10,142 18,775 7,75 18,523 6,7,3 15 11 15 96 7,37 15 11 15 96 7,37 15 11 15 96 7,37 15 11 15 96 7,37 15 11 15 96 7,37 15 11 15 96 7,37 15 11 15 96 7,37 15 97 16 97 17 97 18	7,546 4,191 211 178 12,0-4 140 20 	2,00 1,763 1763 1764,918	161 759 78 1,068 20 50 161 809 10 1058 801 19,292 736 6 89 18 93 16 73 6 89 77 18 107 48 24,53 6,915
66	Grand total value of rolling-stock, in thousands of rupess Grand total value of rolling-stock per mile of line open	4,41.55	2,42,70	2,17,40	12,46,74	7,02,05	2,79,86	\$6,20
67		26,065	27,938	48,658	51,848	24,948	19,677	15,966

DIX 23.
work done by, Rolling-stock.

5'	6"							3	81"						
9 (a) to (y)	10 (a) & (b)	11	12 (a) & (b)	13 (a) & (b)	14 (a)to(d)	15 (a)	16	17 (a) & (b)	(b) & (c)	8 (1)	18 (a) to (c)	19	(e) & (f)	2 (g)to(m)	B No.
N. W.	O. & R	<b>A</b> , B.	B.&N.W.	В. Р.	B.G.J.P.	В.	D.	D. 8.	E.B.S.M.	H.G. V.	J. B.	M.R.W.	N.& S. C.	R. M.	Pograesi

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

	65  65 140  205 0 16 48,082 14,275 29,854 134 39 7,618 82 7,618 5,256	77 10 87 87 87 0·11 24,019 66 3,804 6	35 10 45 205 21 228 271 6 17 16,313 19,823 22,418 45 61 4 138 20 81,47 5,275	 10 10 10 0.06  26,314  72	37 37 37 0.08  18,186  50 2,949 1 7,56	28 223 8 231 259 0 19 31,040 18,747 23,875 50 65 4 18 73,12 5,455	2 2 2 0:40  20,:92  56 	22 4 26 0 80  15,790  43	63 58 74 8 82 150 0·23 25,157 19,25 21,947 69 \$53 6:1 2,479 30 	55 55 55 0·14  18,963 3,286 7 16,05 4,2-7	48 49 49 0 06  29,120  80 5,535 7 13,48 1,666	3 3 3 5 5 5 5 5 11,771 13,117 39 33 37 1,54 2,079	6 -6	145 146 303 448 021 24,812 18,996 68 57 4,175 52 	
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### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

0°04 0°04 0°04 0°26 0°26 0°23 0°61 57.913 54,: 63 59,445 64,: 94 11		0 0 1 0 0 1 0 0 1 0 4 1	255 33 255 0 16 0 01 0 03 0 03 0 013 0 056 S2,060 88 225 8,08 1,774	985 1,0 48 0 07 0 42 0 22 0 22 1 31 2 4,512 30 912 35 475 30,653 90 26 112 59,62 4,389	12 12   2-40 	84 89 0·13 { 0·53 0·48 1·14    	691 - 17 664 0'05 0'06 0'09 0'41 0'22 0'36   39,306 103 27 79	164	217 217 0°04 0°02 0°12 0°12 0°12 0°12 0°12 0°12 0°12	55 0 14 0 09 4 1 0 11 0 74	52 5 57 7 7 0.08 0.03 0.33 0.26 0.70 15,430 0.71 16,978 16,978 18,010 49 20 1	1,679 24 1,708   0 83   47,576 131 31 31	
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1	8,152 2,917 320 253 11,642 159 	4,884       4.4,884       	1,225 4:02 67 1,813 188 201 1,413 468 35 1,413 408 35 1,413 35 100 2,016 3,88 10-22 7,12 7,23 4,77 48 39	\$ 5,954 \$ 279	263 66 14 5 348  263 64 4 5 348 2 27 	298 705 22 23 1,048  298 705 223 1,048 230 6,200 17 8 72 8 18 735 1,248 28 12,58 12,58	3.691 9.3 3098 164 5,155 3,644 15,033 40,23 11,633 40,23 11,633 30,2 11,633 841 30,2 462 301 9.84 841 3.58 460 90,80 6,778	100200	223 814 500 2 1,089  4 1 5 323 814 54 1271  	2,834 .:51 114 58 3,557 1199 10  621 8,033 5607 114 9,724 20 511 3,48 9,377 4,36 3,48 9,377 115 115 115 115 115 115 115 115 115 1	403 382 2 2 817 100 -20 503 362 20 122 20 11,032 404 10'96 419 419 419 419 419 419 419 419 419 419	602 295 	29 25 1 55 15 15 29 40 170 094 475 560 750 1160 2,25 8,018	79 83 8 8 170 1 1 80 83 8 171 2 19 3,668 17 12,569	5.159 2.677 79 100 8,000 	39 40 41 43 44 45 46 47 48 49 50 51 52 55 56 66 61 62 63
	8,52,90 20,407	2,37,31 19,061	90,98 11,794	2,30,88 14,902	12,^8 7,668	28,17 6,191	3,22 71 16,622	intorma- tion not available	24,17 31,390	1,89.28 16,072	40,17 10,274	41,85 5,021	5,45 7,865	14,84 18,098	2,57,14 12,605	66 67

	GAUGE.		8′ 3	ì″					2' 6"	
e No.	Number.	20 (a) & (b)	21 (a) to(f)	22 (a) to(j)	23	24	25	<b>2</b> 6	27	3 2 (b) & (d) (n) & (e)
Progressiv	Partionlars.	R. & K.	g. I.	9. M.	<b>v</b> . c.	B. B. L.	В. L.	В. В.	C.	E. B. S. G. D. & N. B.

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	per diem. (All classes Ton-mileage hauled per e-gine, in thou Average under repairs or rocewels at s Total value, in thousands of rupees	6 06 005 6 006 dt Oceember area	na •	444 441 011 7,930 7,841 4,17 13,64 12,2 3,66	3 165 3 165 4 018 4 018 7 27.966 1 14.224 20,656 2 77 22 39 1 56 3,596 7 24	42 195 195 237 014 26,946 19,693 23,002 52 63 3,821 57,34 3,319	1 2 2 3 004 19,475 53 3,814 1 95 1,354	 3 3 012  17,212  47  77 2,941	7 7 7 0 0 0 9 38,687 1 0 6	3 3 3 3 0·16 10,404 28 7/1 3,786	2 1 3 3 0·25 5,408 15 73 1 27 2,371	2 	 11 11 008  13,208  36  2 1,44 1,604
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### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

Number at close of 1905 Number added in 1906 Number at close of 1906 Number at close of 1906 Number at close of 1906 Strain of 1906 Number por mile of line open.  Number por mile of line open.  All other classes Total of all classes Intermediate class Strain of all classes Ist class Intermediate class Strain of all classes Ist class Intermediate classes Ist class Intermediate classes Ist class Intermediate classes Intermediat	181 227 0 03 0 04 0 03 0 33 0 16 0 61   36,1 (2 99 22 22 	1,009 12 1,131 0 07 0 05 0 18 0 80 0 80 0 80 0 80 1,734 47,739 37,170 44,071 121 183 	1,053 3 1,056 0'05 0 04 0 20 0 0'01   32,742 90 20 48	26 26 0 01 0 03 0 22 0 37	13 10 23	7 26 33 0 36 0:06 0:12	24 -5 19	3 3 0.08 0.08 0.08 0.08 0.08	63 63  0.71 	54 -3 51         
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89 40 41 42 44 44 45 45 46 55 58 58 58 58 58 58 58 58 58 58 58 58	Number at close of 1995.  Number added in 1906.  Number added in 1906.  Number at close of the result of the result of all classes of the result of all classes.  Open Timber tracks, including bolster tracks of the result of all classes.  Open Timber tracks, including bolster tracks of the result of all classes.  Open Timber tracks, including bolster tracks of the result of all classes.  Open Total of all classes.  Open Total of all classes.  Number of all classes of tracks including bolster tracks of the result of	1,015 113 76 15 1,219 99 60  3 162 1,114 173 76 18 1,381 3-88 9,218 25 4-12 3 57 10-60 4-42 27 34,76 84,76	2,281 1,303 71 8 3,753 150 -12  1381 7,381 8 3,891 11,381 2,97 11,88 3,891 7,94 7,94 7,94 7,94 7,94 7,94 7,94 7,94	3,700 1,"44 267 207 5,2:8 162 -24  6 1,920 287 213 5,362 402 5,362 402 5,362 11,808 327 795 695 871 482 1,12,47 6,510	25 10  35  25 10  35 0.50 13,734 4 28 3.22 7.41 6.28 2.50 38 1,77 2,500	6 19	7 15 39 1 62 20 20 20 31 -39 82 27 66 1 1928 4 1921 14-10 15-20 7-50	144 22	18	103 41 132 2791 2 11 108 40 134 3 280 3'15	55 152 200 -17 17 1 38 169 9 210 1:59 
66	Grand total value of rolling-stock, in thousands of rupees. Grand total value of rolling-stock per mile of line open.	47,45 13,966	1,69,29 12,448	1,69,81 9,883	2.72 4,060	2 31 8,885	9,83 13,603	2,56 14,323	40 3,383	Included with E.B.S By. 3 'i'' gauge	8,189

DIX 23-concluded.

### work done by Rolling-stock.

				2′ 6″								<del></del>	2' 0"		,	
1 (b) & (e)	. 30	9 (h) & (i).	6 (g) &(h).	19	1 (c).	1 (d).	20 (c).	35	83	9 (j).	35	5 (g).	86	37	38	Mo.
J. G. E. & R. D.	K. S.	K. K. T. & N. D.	M. D. & T. K.	M. B. W.	м. в.	P. L. L.	P. W. L.	В. Р.	т. в.	D. L.	D. H.	G. L.	Н. А.	н. э.	J.	Progressiv

#### ENGINES.

### (In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

6 8 19 44 23 39 0·110 1,5342 42 2,368 1	24 24 24 24 24 24 6,797 19 19 514 5,76 11,866	30 30 90 0'23  10,515  45 791  7,08 5,364	 3 8 6 0·14  16,700  47  2,04	5 -1 4 1 1 5 0.24 5,189 7,339 7,339 14 20 16  1 94 4,569	• 3 3 3 0·09 25 6.59 69 2,128	3 3 3 3 012 6,652 18 433 176 3,081	5 5 5 5 13,129 36	4 1 5 5 5 0·15  19,782         	3 3 3 0-15 	7 7 1:13	18 -1 17 17 0:33 18,723 38 2 3,09 6,058	15 15 15 15 0.08  10,510  29		4 4 4 020 8,908 24 65 8,250	7 7 7 7 7 0 223	1 2 3 4 5 6 7 8 10 11 12 18 14 15 16 17 18
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### COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

78 8 80 80 80 80 80 80 80 80 80 80 80 80	56 20 76 0-02 0-01 0-03 0-25 6,872 8,121 5,594 8,328 9,001 7,788 78	11 5 10 21 6.00 21 6.00 0.00 0.3 0.00 0.3 0.23 1.4 0.10 0.3 0.48 2.5 20,947 20,946 21,667 9,065 17,329 12 12 14 1,4 6,78	3 0.06 0 0.04 0.02 0.05 0.06 0.06 0.06 0.06 0.06 0.06 0.06	8   18   5   6   6   6   6   6   6   6   6   6	15 7 0·15 8 0·15 0·45 0·15 0·75  	9 97 -9 2 99 0.48 0.54 0.80 0.08 1.90	63 66 10 11 73 76 	1 1'00	23
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170 105 28 28 300 40 170 145 23 840 113 14,763 14,763 14,763 14,763	80 60	84 336  11 431 -12  8  74 388  19 431 327 4,550 12 450 123 864 348	12 12	20 47  1 68  20 47  1 68 328  3:25 3:25 4.76	4 8 12    4 8 12 0:37 6,233 17 5:00 5:00 5:00 11:00	2 14 16 2 14 18 0 0 5 3,822 9 6 98 4 06 9 94 7 7 38	58 2 111 71	20 21 41 20 21 21 21 21 275 2-15 5-90 5-90	300 18 2 500 18 22 300 18 22 500 2:500 4:000	326 826   328 328 0 53	44 179 6 199 248 5 5 12 11 6 49 191 191 8 254 4.93 	80 55 1 101 237 1 130 213 2 60 5 13 4 16	14 8	6 4 4 8 8 0 40 8 0 500 5 500 5 500	42 29 5 76 238	89 40 41 43 44 46 47 48 49 50 51 52 53 54 55 56 57 58 59 69
2.83	2:80				4.18	8:48		***								61
40	10 2,58 5028	8 11 4 8 8 8,660	7 2,68 6,102	 1,22 5,869	26  61 1,897	12  41 1,688	4	 61 1,836	::: ::: :::	 	 3,75 7,858	:::	 3,90 10,532	 1,03 5,150	::	62 63 64 65
25,76 8,580	14,76 24,832	19,76 10,424	4,72 10,727	3,56 16,952	1,30 4,062	1,48 5,920	1,42 3,641	2,19 6,636	1,60 8,000	::	6,84 18,412	5,56 3,088	6,58 17,649	1,68 8,400	2,09 6,531	66 67

# APPENDIX 24. Rolling-stock fitted with automatic brakes at the close of the calendar year 1906.

Nv	MBER.			Lo	COMOTIV	xs.	Co	DACHING DING ALI	VEHICL	es Vans.	Goods	THICLES CRAN	, EXCLU	DING
Main head.	Sub- bead.	Gauge.	RAILWAY SYSTEM. (Vide Appondix 38.)	Fitted.	Not fitted.	Proportion per cent, of fitted to total.	Braked.	Piped.	6ttud	Propor- tion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Propertion per cent. of fitted to total.
1	(a)	i ſ	Bengal-Nagpur	176	115	60.48	809	2	145	84.83	1,259	574	5,788	24.05
2	(a) to (f)		Bombay, Baroda and Central	185	35	84.09	508	4	• 134	79.26	2	49	5,075	0.39
3	(a)		India. Eastern Bengal State	143	57	71.50	518	61	140	80.23		12	4,040	0.30
4		II i	East Indian	495	451	52:33	1,618	80	797	68.06	414	78	18,252	2.62
_	(	9	Great Indian Peninsula .	b										
5	(a) to {	}`` 1	Indian Midland	\$ 560	302	64.97	1,783	6	586	75 33		167	11,942	1.38
6	(a) to (d)		Madras	163	109	59.93	1,012	' 15	202	83.56	250	15	4,638	5.40
8	(a) & (b)		Nizam's Guaranteed State .		61		57	3	129	31.75			1,056	
9	(a) to (y)		North Western State	808	12	98 54	2,254	78	220	91.38	i	117	10,476	18.16
10	(a) & (b)	]	Oudh and Rohilkhand State.	152	53	74.15	721	49	90	89.53	29	13	5,524	0.75
11		h i	Assam-Bengal	78	9	89 65	251	4	11	95.86	1	7	1,689	15.59
12		11	Bengal and North-Western .	1	175	35.42	470	2	656	41 84			6,302	
13			Bengal Dooars	C.	10			3	60	4.76			345	l
14		li l	Bhavnagar-Goudal-Junagad-	j i	37				255	-,,,			1,046	"
15			Porbandar. Burma	152	107	59.69		33	512	50.67	1	14	4,920	5-98
16			Deoghur	1	2			I	12	1			1	538
		li	Dibru-Sadiya		1		·"		i			٠٠.	10	"
17		li .	Eastern Bongal State	7.07	26				89		"		1,092	1"
3	(b) & (c)	É		121	29	80 67	427	40	197	70.33	ı	2	3,763	0.02
8	(c)	) is	Hyderabad-Godavarı Valley.	'l "	55		3		161	1.83			895	
18	•••		Jodhpur-Bikaner		48			2	215	0 92			992	
19	•••	11	Morvi		5		٠.	2	53	3.64			70	
6	(e) & (f)		Nilgeri and Shoranur-Cochin	6	12	33 33	12		45	21.05	22		149	12.87
2	(g) to (m)	li l	Rajputana-Malwa	76	372	16.06	174	79	1,450	14.86			7,080	
20	(a) & (b)	II I	Rehilkund and Kumaon .	18	30	37.50	51	14	162	28.03			1,371	
21		li i	South Indian	93	155	37.50	258	2	871	22.99			3,888	
22			Southern Mahratta	48	189	20*25	118	3	985	11.46		<b>*</b> :	5,341	
23		Į)	Udaipur-Chitor		3				26				35	
24		h	Baraset-Basirhat Light .		3				23				25	
25	•		Barsi Light	3	1	42.86	26		7	78.79	1		92	1.07
26			Bukhtiarpore-Behar Light .		3		<b>l</b>		19	١		l	84	
3	(4)		Cooch Behar including 2'6" gauge branches of Eastern Bengal State Railway.		15				63				. 280	
27		H	Cutoh		3				3	•••		•••	18	
2	(n) & (o)	11	Gackwar's Dabhoi and Raj- pipla.		11				51				210	
1	(b) to (r)	) te	Jubbulpore-Gendia, Mour bhanj, Parlakimedi Light and Baipi r-Dhamtari.	22	13	62.86	54		39	59.06	265		103	72.01
* 30		ll 💝	and Raiper Dhamtari. Kalka-Simla	24		100.00	92	·		100.00	199	61	l	100.00
9	(h) & (i)	11	Khushalgarh-Kohat-Thal an		30	1			80		"	"	431	1
6	(a) & (h	Ji	Nowshera Durgai.  Morappur-Dharmapuri and	1			1							"
19	1		Tirapattar-Krishnagiri Morvi		6 5	1			21 53	1			48 68	
20	(c)	11	Powayan Light	1 "	5		,		18		"	""	71	1
82		li	Tarakeshwar-Magra Light		5	1		""	25	"	ļ	"	41	1
83		11	Tezporo-Balipara Light		3				15	-	"	"	50	
		Ľ	Dandot Light	1	1				1	"	"	"		1
9	()	H	11	' ···	7			***			"		326	1
35		li.	Darjeeling-Himalayan .		17	1	1	<b>*</b>	99				254	1
5	(g)	6,6	Gwalior Light	1	15	}			73				237	1
36			Howrah-Amta Light		11	}			78			ا	82	1
37		11 -	Howrah-Sheakhala Light		4	i			20			3	8	1
35		1	Jorhat		7				22				76	
			Total	8,419	2,626	56.26	11,709	482	8,862	87:91	5,149	1,109	109,078	5-42
_		1	j.	1	1	1	1	1	į.	1	l	1	1	1

## APPENDIX 25.

## Bolling-stock lighted by gas and electricity at the close of the calendar year 1906.

N1	omben,	Gauge.	RAILWAY SYSTEM.	Numi vehiole	or of cost stated for ing with	or light.	Number of coaching	tion per	Rumanus.
Main head.	Sub-head.	Gauge.	(Vide Appendix 38.)	Gas.	Elec- tricity.	Total.	vehicles not fitted.	cent. of fitted to total.	Kemarks.
1	(a)	) (	Bengal-Nagpur	755	2	757	148	83 61	and the second s
2	(a) to (f)	li 1	Bombay, Barêda and Central India .	405	9	414	7	98-34	
3	(a)		Eastern Bengal State	486	2	4:8	224	68-54	
4	•••		East Indian	1,485	6	1,491	192	88.59	
5	(a) to (f) {	5' 6"	Great Indian Peninsula	} 1,370	60	1,430	69	95:46	
6	(a) to (d)		Madras	1,032		1,032	164	86-29	
8	(a) & (b)		Nizam's Guaranteed State	121		121	60	66.85	
9	(a) to (g)	1	North Western State	2,002	3	2,005	284	87·5 <b>9</b>	
10	(a) & (b)	ľ	Ondh and Rohilkhand State	688	7	695	165	80-81	
11	•••	h r	Assam-Bongal	245		245		100.00	
12	•••	]	Bengal and North-Western		189	189	939	16 73	
13	•••		Bengal Docars : .		•		• 63		
14	•••	]] [	Bhavnagar-Gondal-Junagad-Porbandar		23	23	232	9.02	
15	•••	li l	Burma		26	26	944	2.68	
16	•••	II I	Deoghur				12		
17	•••	li i	Dibru-Sadiya				89		
3	(b) & (c)	II I	Eastern Bongal Stato	478	1	479	180	72.68	
8	(c)	3′34″	Hyderabad-Godavari Valley	114		114	50	69:51	
18	•••	[] [	Jodhpur-Bikaner		112	112	90	53.08	
19		II i	Morvi				55		
6	(e) & (f)		Nilgiri and Shoranur-Cochin				57		
2	(g) to $(m)$	II I	Rajputina-Malwa		815	815	888	47.86	
20	(a) & (b)		Rohilkund and Kumaon		58	58	169	25.55	
21	***	]]	South Indian		106	106	996	10.47	
22	1		Southern Mahratta	971	1	972	51	94.78	
23	***	ji (	Udaipur-Chitor				26		
24		l) (	Barasot-Basirhat Light				23		
25	•••	11 1	Barsi Light		23	23	7	76.7	•
26	•••	]}	Bukhtiarpore-Behar Light			• •••	19		
8	<b>(</b> d)		Cooch Behar including 2'6" gauge bran- ches of Eastern Bengal State Railway.				63		
27	(n) & (o)	}}	Cutch			•••	3		
1	(b) to (e)	> 2′ 6″ ≺	Jubbulporo-Gondia, Mourbhanj, Parlaki- medi Light aud Raipur-Dhamtari.	52		52	51 29	57.14	
30	•••	lî * ° ì	Kalka-Simla		92	92		100 <b>.0</b> 0	
9	(h) & (i)		Khushalgarh-Kobat-Thal and Nowshera Durgai.				. 80		
6 19	(g) & (h)		Morappur-Dharmapuri and Tirupattur- Krishnagiri Morvi				21		
20	 (c)	!	Powayan Light	l		•••	53 18		
82		11 1	Tarake-hwar-Magra Light	-			18 25		
33	*** ,		Texpore-Balipara Light	""			25 15		
	***						10	""	
9	(j)		Dandot Light						
85	•••		Darjeeling-Himalayan			•••	99		
5	<b>(g)</b>	2'0"	Gwalior Light				78	 	
86			Howrsh-Amta Light				78	₩.	
87	•••		Howrah-Sheakhala Light	-		\ ···	20		
88	***	μ ,	Jorhat				22		
- 1		1	Total .	10,204	1,535	11,789	6,784	68.88	, de

### , APPENDIX 25-A.

Statement showing the number of trains provided with means of communication throughout between passengers and guards and drivers on the 31st December 1906.

. Ped	Sub-head.	Gauge.	RAILWAY SYSTEM (vide Appendix 38).	Particulurs.	Mail.	Passen- gers.	Mixed.	Total.	Remarks,
Main b	Sub-neau.		, were sent of the control of the co						
3	(a)	<b>)</b> (	Eastern Bengal State	Total number of trains run	8	80	55	143	Vacuum brake
ŭ	(6)		Laster Bengin Date (	Total number of trains fitted with communication	8	39	5	52	alarm com- munication.
ż		5'6"		Total number of trains run	12	39	73	124	Chain Pass;
5	(a) to (f)	J	GreatIndian Poniusula	Total number of trains fitted with communication	1	·	•••	1	communica- tion, English pattern.
3	(b) & (c)		Eastern Bengal State	Total number of trains run	4	7	51	62	Vacuum brake
Ů	(6) 6 (7)	i i	1	Total number of trains fitted with communication	4	3		7	munication.
				Total number of trains run	8	13	55	76	Electric com-
2	(g) to (m)	3′ 33″	Rajputana-Malwa {	Total number of trains fitted with communication	6	5		11	munication.
			,	Total number of trains run	8	30	74	112	
21		ji	South Indian {	Total number of trains fitted with communication	4			4	•

### APPENDIX 25-B.

Statement showing the number of carriages provided with means of communication between passengers and guards and drivers on the 31st December 1906.

73	CBER.								ing.		
Ī	Sub- lead.	Gauge.	RAILWAY SYSTEM (vide Appendix 38.)	Particulars.	Jal.	2nd.	Inter,	Srd.	All other carriages including composites.	Тотаі	Bemarks.
		) (	(	Total number of carriages	26	29	26	399	476	956	Edward King's pat
l	(a)		Bengal-Nagpur	Total number of carriages fitted with communication.	1	•••			1	2	stop train alarm
(	(a) to		Bombay, Baroda {	Total number of carriages	3	33	17	299	294	646	English chain sys
١	(V)		and Central {	Total number of carriages fitted with communication.	20	9			19	48	automatic vac
١	(a)	1 1	Eastern Bengal	Total number of carriages	15	16	45	224	419	719	Vacuum auton brake alarm
	(0)		State.	Total number of carriages fitted with communication.	9	9	16	58	78	170	munication. F teen carriages been provided Edward King's train alarm signs
١				Total number of carriages	89	77	88	971	1,270	2,495	Bamber's patent a apparatus.
l	•••		East Indian }	Total number of carriages fitted with communication.	26	39			85	150	* pparatus.
١	(a)	5' 6"	Great Indian Pe-	Total number of carriages	98	145		872	1,260	2,375	Chain Pass: munication,
	to (f)		ninsula.	Total number of carriages fitted with communication.	21			G	21	48	munication, lish pattern.
۱	1		(	Total number of carriages	38	79	4	558	550	1,229	Antomatio vac
	(a) to (d)	]	Madras	Total number of carriages fitted with communication.	1	•••				1	brake commu tion.
١		li	North Western	Total number of carriages .	82	91	133	972	1,274	2,552	Vacuum brake
ļ	(a) to	1 1	State.	Total number of carriages fitted with	64		5	15	136	220	munication, K
1		i 1	Oudh and Robil-	Total number of carriages	40	33	39	329	425	860	Vacuum brake sy
	(a) & (b)		khand State.	Total number of carriages fitted with communication.	12	20		26	72	130	
١		,	Eastern Bengul	Total number of carriages	18	19	47	278	302	664	Vacuum auto
	(b) & (c)		State.	Total number of carriages fitted with communication.	12	13	13	62	45	145	brake alarm munication. carriages have provided Edward King's
				Total number of carriages	7	6	17	94	93	217	Edward King's train alarm sign Electric common
-	<b></b>	3' 31"	Jodhpur-Bikaner	Total number of carriages fitted with communication.	7	6	17	94	93	217	tion.
				Total number of carriages	108	87	51	859	598	1,708	Electric comm
1	(g) to (m)		Rajputana-Malwa-	Total number of carriages atted with communication.	108	40	45	483	300	976	tion.
				Total number of carriages	15	28		672	416	1,181	

### APPENDIX 26

Builways on which points and signals were interlooked and on which block instruments were used for train signalling at the close of the calendar year 1906.

Nt	IMBED.	Gauge.	RAILWAY SYSTEM.	Total number of stations on rail-way.	STA*	TIONS AT WEIGH POINTS AND SIGNALS WERE INTERLOCKED,	STAT	ions at which block in- uments were used for train signalling.
Main head.			(Vide Appendix 38.)	Total m station way.	No.	Name of system of interlocking.	No.	Name of block instru- ment.
1	(a)		Bongal-Nagpur	240	101	81 List and Morse's . 20 Experimental .	} 16{	2 Webb and Thomson's. 2 Dutton's. 12 Thoobald's Train Key.
, <b>2</b>	(a) to (f)		Bombay, Baroda and Contral India .	138	33 {	25 Mackenzie and Hol- land's. 8 Experimental .	} 85{	59 Proces's single wire sema- phore. Does not give out a token or tablet. 26 Experimental.
8	(a)		Eastern Bengal State	129	35{	24 Ordinary double line interlocking. 11 Experimental	} 22	Pryce and Ferreira's. Token not necessary. 76 Pryce and Ferreira's. Token not necessary.
4			East Indian	414		110 English system .  106 Dutton's  1 Experimental	255	76 Neal's Patent Voucher. 37 Tyer's Tablet. 58 East Indian Railway double line block instrument. 8 Fast Indian Hailway tablet.
¥.	(a) & (b)	5'6"	Great Indian Peninsula	264	68	47 English system  18 List and Morse's  3 Experimental.	264	906 Prece's. Does not give out a token or tablet. At some of these stations two kinds of instruments are used. *65 Neal's.
5	(c) to (f)		Indian Midland	148	17{	11 Wrench's 5 English system 1 Experimental.	} 46	Presen's. Does not give out a token or tablet.
6	(a) to (d)		Madras	318	61	37 List and Morse's	2220	84 Winter's Block with starting semaphores. Does not give out a token or tablet. 16 Winter's Block without starting semaphores. Does not give out a token or tablet.
8	(a) & (b)		Nizam's Guaranteed State	45		24 Experimental 1 List and Morse's 1 Dutton's 293 List and Morse's	} ]	120 Thoobald's Train Key 11 Tyer's Tablet.
9 10	(a) to (g)		North Western State	623	353{	27 Tappet	37	26 Tyer's double line block instruments.
1	""	, (	Oudh and Rohilkhand State	191	116 {	13 Experimental	} 2	Experimental.
11 12 13	:::		Assam-Bengal Bengal and North-Western	126 287				******
14	:::		Bengal Dooars Bhaynagar-Gondal-Junagad-Porbandar	29 64	 2	Experimental		10110
15			Burma	236	24	12 List and Morse's .  12 Experimental .	} 13{	7 Sykes'. 2 Tyer's Tablet. 2 Neal's. 2 Thoobald's Train Key.
16 17	::		Dooghur Dibru-Sadiya	1 18	= `			
3	(b) to (d)		Eastern Bongal State	145	21	20 List and Morse's .	} 20	Tyer's Tablete
.8	(c)	1	Hyderabad-Godavari Valley	47	42	1 Experimental List and Morse's	)	
18 19	:::		Jodhpur-Bikaner Morvi	85 8	:::			******
6	(e) & (f)	8' 31" {	Nilgiri and Shoranur-Coohin	32	1	Experimental	12	6 Winter's Blook with start- ing semaphores. Does not give out a token or tablet. 6 Theobald's Train Key.
2	(g) to (m)		Rajputana-Malwa	295	101	87 Sydney Jones'	} 45{	42 Tyer's Tablet.  3 Experimental.
20	(a) & (b)		Rohilkund and Kumaon	61	4	Experimental. 25 List and Morse's	, c	24 Winter's Block and
21			South Indian	243	35 {	7 Dutton's 3 Experimental	<b>}</b> 25 <b>}</b>	Ticket issuing.  1 Experimental.  96 Winter's. Does not give
23	•••		Southern Mahratta	241	1	Experimental 4	106	out a token or tablot. 6 Boberts' Key Staff. 4 Theobald's Train Key.
28		, (	Udaipur-Chitor	7	•••		*	
24 25 26 27			Baraset-Basichat Light Barai Light	11 15	:::	*****		*****
	(1)		Bukhtiarpore-Behar Light Cutch	2	=	*****	·•• ···	*** \$40
2 1	(n) & (o) (b) to (e)		Gackwar's Dabhoi and Rajpipla Jubbulpore-Gondia, Mourbhani, Parlaki-	32 54	1	Country made .	:::	******
9	(h) & (i)		medi Light and Raipur-Dhamtari. Khushalgarh-Kohat-Thal and Nowshers-	1				
<b>80</b>	(g) & (h)	2'6"	Durgai. Kalka-Simls Morappur-Dharmapuri and Tirupattur- Krisinagiri.	21 10	==	******	***	******
19 20 82	(6)		Morvi Powayan Light Tarakeshwar-Magra Light	2 8 16	:::	****** ******	***	000 0 000 000
88		Ľ (	Tezpore-Balipara Light	8	-		,	***
85 5	(g)		Darjeeling-Himalayan Gwalior Light	11 23		******		404 sets
86 87	***	200	Howrah-Amta Light Howrah-Sheakhala Light	18 19	:::	, , , , , , , , , , , , , , , , , , ,		100 111
36		ן י	Jorhat	8				100 000
40	A	•	Total .	4.717	1 285	1	1.168	1

### APPENDIX 27.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906.

			SOURCE			DESC	RIPT C	ON ON	F FUEL MED AN	WIT ID CO	H ACT	UAL QI R TON.	UANTI	TY	(Calou	lated o	on in i	actual	
	App. 38.	Calen-	NAME.	TANCE O	stance is	Fore	IGN CO		lndi	AN CO			<b>Тоор.</b>		reduce the rat	d in te	rms of o ton of o od.)	oal at oal to	Remarks.
11 march	Ry. system, vide	dar year.	of the sources of apply is for coal only. Wood was supplied from various sources.)	from the of supply the p deli-		Quan- tity in tons.	In-	Ex- cluding freight,	Quantity in tons.	In- cluding freight	Ex-	Quan- tity in tons.	In- cluding freight.	Er-	Per train mile.	en- gine mile.	1,000 freight ton miles.	1,000 gross ton miles.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	B. C.	1902 1903 1904 1905	Bengal .	162 162 - 162	 Amalgo	 mated w	Rs.	Rs.	8,466 10,623 9,789 tern Be	Rs. 6.27 6.00 5.67 ngal S	Rs. 3.00 3.00 3.00 3.00 tate r	ailway.	Rs	Rs.	51·47 51·10 51·24	41.10	1,368·09 1,278 70 1,113·51	201·02 256·18 186·82	
	B. N.	1902 1903 1904 1905 1906	Bongal and Umaria	\$21 283 228 219 227					113,180 134,066 148,725 177,960 199,707	4·29 9·71 5·52 5 16 5 40	2:48 2:13 2:58 2:34 2:43	103 206 219 287 163	5·60 4·20 	5·60  	59·84 65·95 67·95 71·81 78·55	58'65	759:43 775:46 754:48 648:19 624:02	178:58 190:42 200:80 195:34 192:58	
	J. G. E.	(1902) 1903 1904) 1905 1906)	Bengal	603 617 620 451					191 3,165 5,706 9,329	764 10:31 10:18 7:11	2·12 2·46 2·:8 2·43				64:85 56:20 54:33 66:15	47.63 45.53		393-30 844-98 900-75 380-13	
	М. В.	${1905} \\ {1906}$	Bengal	{ 188 188	:::	:::	:::		417 347	4·69 4·84	2·28 2·43		:::	:::	24·01 32·97	23 63 27 99	1,265 94 1,852 78	440.05 396.27	
	P.L. L.	(1902) 1903   1904   1905   1906	Rengal	603 567 495 495 495					350 362 361 354 296	7:96 7:40 8:70 8:52 8:67	2:37 2:12 3:46 2:28 2:43				41.56 44.43 44.19 43.24 35.56	42 06 42 38 40 30	5,545-54 3,873-00 2,685-67 2,375-43	627:00 512 19	
-	R. D.	1908 1903 1904 1905 1906	Bengal	480 463 443 442 442		:::			554 683 785 856 780	6·41 6·07 8·12 7·95 8·10	2:37 2:12 2:46 2:28 2:43				23:31 26:61 29:43 30:89 28:99	26.35 29.08 30.41	1,260:15 1,486:37 1,168:36 1,991:26 1,126:17	437°75 403°00 369°67	
11	B., B.& C.I.	1902 1903 1904 1905 1906	England, Bengal and Singareni.	128 121 129 148 115	   	7,477 10,384 13,545 12,621 28,692	20·00 19·33 19·62 16·87 19·37		65,559 63,172 67,666 75,769 64,635	15:98 14:16 12:92 12:33 12:95		2,063 2,226 2,344 2,494 2,491	3·27 3·00 3·06 3·06 3·27	  	58:11 57:58 59:27 57:81 57:18	48·99 48·16 49·22 48·43 47·42	513.66 514.46 536 53 514.60 478.62	148.09 152.36 149.83	,
9	3.D. L. R.	1902 1903 1901 1905 1906	Bengal.	[ ::: ::: :::		  		::	1,039 1,417 1,246 1,384 1,833			21 70 83 207 79			24·18 25·50 25·39 27·05 28·91	25 17 25 12 26 90		:: :: ::	
	e.b S.	1902 1903 1904 1905 1906	Bengal	167 156 182 180 188		  		::: ::: :::	67,891 69,266 69,974 90,396 119,032	6·10 5·65 5·02 4·82 5·81	3·48 2·61 2·39 2·48 2·61	 	  		60·86 72 02 72·78 73·38 80 20	19 11 53-19	889-42 919-95 863-33 975-41 998-93	212.78 206 85 282.28	
1	E. B. S.	1902 1903 1904 1905 1906	Bongal and Assam.	291 280 285 281 299		:::		:: ::: :::	42,838 47,247 49,991 48,662 57,527	9-82 6-52 6-09 6-06 6-38				 	42-62 41-07 45-84 46-8 48-90	35 65 36 77 36 52		229-44 231-02 227-78	
)	C.B.	1902 1903 1904 1905 1906	Bengal and Assam.	407 85 72 75 71		:::			785 980 1,271 587 856	10.69 9.86 9.45 9.77 9.62	9·04 9·40 9·11		     		29:95 29:76 36:86 17:59 20:40	21.50 80 22 14.61			
	E,1.	1909 1909 1904 1905 1906	Bengal and Umaria	260 256 244 245 257		  		:::	481,247 476,581 468,271 505,916 532,758	4.01	2.00 1.97 1.92					51.97	457·12 406·83 431·67	151·16 187·59 145·77	

## APPENDIX 27-continued.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1903 to 1906—contd.

•					ESOF S	UP-	DES	ORIPT	ION C	F FUE MED A	L WIT	H AC	TUAL Q	UANT	TY	Cor	SOMP:	rion in	LB6.	
		vide App. 88.	Calen-	NAME. (The name of the sources of	AVERAGI TANCE C. ED IN B (The dis is rock either fro	ARRI- ILES. stance oned		Cost po		٠١	AN COA			Vood. Cost pe	r ton.	quant redpo	ity of o ed in t the rat	on the s coal, and terms of e of 1 tor cons of w	wood coal of	● Remades.
	Number.	By, system, vi	year.	supply is (or coal only Wood was supplied from vari- ous sources.)	source supply o the pla delivery eral sto	s of r from ons of to sev-	Quanti- ty in tons.	In- cluding freight	Ex- cluding freight	Quanti- ty in tons.	In- cluding freight.	Ex- cluding freight.	Quanti- ty in tons.	In- cluding freight	Ex- cluding freigh .	Per train mile.	Per eu- gine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	
•	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
,	St3.	G. I. P.	(1902) 19#8   1904 } (1905   1906)	England, Bongal, Singurent, Umaria, Nerbudda aud Warora.	294 327 304 304 304	:: :: ::	303 202 729 635	Rs.	Rs. 12:87 18:54 16:64 17:91	425,936 456,794 463,917 453,414 477,265	Rs. 8 38 8 47 8 89 9 25 9 59	Rs. 598 6 07 6:45 7:37 6:75	4,515 4,439 5,117 4,896 4,456	Bs.	8.81 3.91 3.58 3.51 4.00	66-79 68-43 68-91 67-43 68-43	58°11 59°65 60°50 59°09 59°73	719·69 798 03 776·00 755·75 731·29	193-68 206-32 205-09 200-52 195-91	υ
	* 5 (g)	G. L.	(1902)   1903     1904     1905     1906	Bengal and Moh- pani.	750 535 535 535	:: :: ::		::	: : :	1,400 1,617 1,990 2,558 2,848	16:00 13:28 13:62 13:37 (a)	2:75 3:25 3:75 3:75	11 24 27 25	:: ::: :::	  7		35-03 36-00 34-10 38-81 40-45	d.:	::	(a) Reduced to Bs. 10°13 per ton from 18th November 1906.
	6 (a) to (d)	м.	1902 1903 1904 1904 1905 1906	England, Bengal and Singa- reni.	313 333 191 352 350	14 27 38 24 36	 4 	51 82 :::	28·49	97,546 112,647 130,755 156,312 157,081	10 62 10 29 10 82 10 23 10 52	5·25 5·12 8•95 5·15 5·70	108,529 96,577 59,148 42,059 31,115	4:97 4:97 4:81 4:48 4:84	4.68 4.42 4.01 3.98 4.09	68:64 73:02 70:78 74:96 74:98	57*65 60*89 58*69 63*85 63*74	974·72 1,069 81 946 28 674·82 895 19	227 03 240 40 224 48 221 69 228 97	
	6 (e) to (h)	No.CMO.	1902 1903 1904 1905 1906	England, Bengal and Singa- reni.	241 688 148 207	16 18 21 24	1,875 1,642 2,430 2,517 2,580	29 00	*27.57 *29.17 *22.54 20.58 21.33	11 183 284 1,463	13-60 14-34 12-48	5·12 8·95 5·15	8,315 5,889 5,116 4,502 6,168	4·43 4·61 4·49 4·62	4.09 4.75 4.01 4.12	72:38 61:42 61:30 60:50 40:85	54.08 54.18 52.45	4,399·75 2,409·43 2,605·63 2,637·63 3,11·1·6	654-46 809 85 423-49 424 78 455 45	Including sea freight
	8 (a) & (b)	К. К. G. S.	1902 1903 { 1904 } 1905 1906	Singareni	103 133 132 81 86		  			30,215 26,967 26,276 24,900 26,919	6 27 6 27 5 81 5 59	4·66 4·50 4·68 4·69	250 203 		8 25 1/14	57:30	50:75 51:91 50:87 49:19 47:98	567:37 547:72 523:22 516:05 504:20	173:81 160:45 158:74 154:58 153:51	† Of Bongal coal only.
,	<b>8</b> (c)	н. G. V.	(1902)   1903     1904 }   1905     1906	Singaren	341   847   847   291   266		::. :::			14,442 14,610 14,809 16,686 15,688	6 96 10-00 9-82 8 90 7-83		265 205		5.56 	40 12 30 66 40 86 59 50 37 59	25:70	1,031.64 986.72 825.63		1 237 to Rs. 3'00 and 3 Khost and Dandot b coal between Rs. 7 and
	(a) to (g)	N. W.	(1902)   1903     1904     1905     1906	England, Bengal, Dandot, Bhagan- wala and Khost,	\$38 \$38 \$38 \$38 \$38 \$38	***	7,206 3,786 +1650 +12,373 2,872	##	20.61 19.00 ††	248,279 258,111 970,454 431,520 476,877	\$\frac{1}{11}	(F)	122,823 216,093 163,15 76,886 77,123	5·31 5·35	1 :::	52 84 52:12 57:16 59:82 62 32	46.47 50.12 52.10	55:78 481:27 14:00	155.7 156.9 172.0	mari Re. 12:00 and vid Chaziabad ke. 14:88. 4 ** Bengal coal from Rs. 1 2:06 to Rs. 3:50 and Khost and Dandot coal
	9 (h) & (i)	K. K. T. & N. D.	( 1902)   1908   1904 }   1905   1906	Bongal and Dandot.	{ :::		  	::   <del>     </del>   ::	::   <del>!!</del>   ::	1,235 2,788 2,731 2,726 3,548	ii	.:: (b) (d)	166 192 276 132 74	5.85		26 75 25:16 21:81 19:72 19:43	21:45 17:88 16:68	3 2,:62·4 3 1,882 2	9 435.4 1 385.2 4 801.9	during those years.  I Bengal coal vie Kiamari R. 11'08 and vid Ghazabad Es.
	10 (a) &	O B.	[1902] [1903] [1904] [1905]	Bengal	674 595 603 603 603	*** *** ***	:::			98,775 108,040 119,278 131,446 142,729	7.46	2 12 2 13 2 13				51.68 54.81 55.39 59.17 61.69	46.99 47.69 50.26	849.59 791.59 5 919.40	179 4	Ghasabad Rs. 13 84, \$6 Hengal coal from Rs. 1 194 to Rs. 3 25, Chita Baud coal Rs. 11 22 and Khost and Dandot coal between Rs. 6 98 and Rs. 13.
<b>\$</b> .	11	A. B.	1902 1903 1904 1905 1906	Assem.	105 120 120 156 249		## ## ## ## ## ##			18,661 15,682 22,837 81,778 87,185	7.64	-	2,711 1,918 			48:55 43:06 43:85 47:94 52:12	36.76 36.08 38.93	913.9	245°2 235°1 3 265°0	4 and Bs. 12-27. 17 10 (c) Bengal coal vid 10 Kiamari Rs. 11-76
	12	B.	[1902] 1903 1904	Bengal.	252 250 248 248 286 289	25 25 18 18 71	10° 110 121 121	001 001 101 101		71,240 87,652 97,638 97,424 111,475	5.61 5.51	2·78 2·41 2·43	4,783 1,147 808	4-28		49·95 52 62 47·86	41.78 13.32 39.26	825.65 830.70 850.31	3 225 0 5 228 2 5 228 2	and Khost and

## APPENDIX 27-continued.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—contd.

1			SOURC	ES OF S	JPPLY.	DESC	CRIPT	ION O	F FUEL	WITE D COS	I ACT	UAL QU TON.	JANTI	Y			rion in i		
	App. 36.	Calon-	NAME. (The name of the sour-	AVERACE OF IN MI	arkied Les.	Form	ign co	AL.	Indi	IAN CO	۱L.	W	700D.	,	quan reduc the	tity of ed in to rate coal to	coul, and erms of c of one to 21 tons o	wood oal at	
	ride	dur year.	ces of supply is for cost only.		d cither	Quan-	Cost p	or ton.	Quan-	Cost p	er ton.	Quan-	Cost pe	er ton.			Per	Per	Remares.
•	Ry. system,		Wood was	the place livery to storas Coal.	st of de- several	tityin	In- oluding froight.	Ex- cluding freight.	tity in tons.	In cluding freight.	Kr• cluding freight.	tity in tone.	Iu- cluding freight.	Ex- cluding freight	Par train mile.	Per en- gine mile.	1,000 freight ton miles.	1,000 gross ton miles.	
1	2	3	4	5	•	7	•	9	10	11	12	13	o 14	15	16	17	18	19	20
v	B. D.	\begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix}	Bongal	•	{	::	Ra.	Rs.	2,196 3,023 3,471 3,652 3,876	Rs 12:33 11:22 10:60 10:67	Rs. 2.75 		Rs.   	Rs.	40°16 31 33 30°14 30°52 35°56	33 92 20 83 28 05 28 78 32 95	   	  	*Prices are given at the place of delivery which is the place of storage.
4	B. G. J. P.	$     \begin{bmatrix}       1902 \\       1903 \\       1904 \\       1905 \\       1906     \end{bmatrix}   $	Eng- land, Bengal and Palana	52 54 53 53 53 53	  	1,19 <b>‡</b> 813 2 5 	23·23 23·24 23·23 23·23 		4,966 6,027 7,531 8,010 9,050	18:00 15:44 14:13 14:07 13:54		74 80 86 83 91	8·88 7·73 7·50 7·50 8·03		29:77 30:26 31:20 32:05 33:45	27:45 27:82 28:37 29:03 30:25	913:30 800:61 774:69 816:07 840:55	174·64 170·38 173·11 179·85 186·52	,
5	В.	(1902) 1903 1901) 1905 1906)	Erg- land, Bengal and Burma.	120 100 128 150 162	   56	3,174 908 509 348 83	26·75 21·36 21·22 21·21 21·21		62,124 72,740 78,584 95,711 94,784	12:57 10:63 10:17 10:33 10:70	:: :: ::	55,474 66,406 52,977 28,903 22,912	3:95 3:81 4:541 5:06 4:74		52:32 51:98 49:98 50:38 45:51	42:51 42:70 41:42 41:49 87:66	972:47 1,087:55 981 89 959:94 836:51	255·40 258·16 240·27 237·11 211·50	
3	D.	1902 1903 1904 1904 1905 1906	Bengal	{ }	 	   Informa	tion r	ot ava	400 393 501 ilable	5:62 4:06 5:50	3·00 2·25 	::: :::	a.  		61·37 56·55 71·80	61:37 56:55 	 ::: 	::	W
7	D, S.	1902 1903 1904 1905 1906	Азват			::: ::: :::			4,616 3,983 4,538 5,012 6,664	8:50 8:50 8:50 8:50 8:50	8:50 8:50 8:50 8:50 8:50	26 12 10 4	2·08 2·56 1·71 2·22	1·28 2·00 1·71 2·22	51.64 43.67 51.88 49.79 55.07	36·75 29·46 33·39 32·06 36·34	 	1 1 1 1 1	·
8	J. B.	(1902)   1903     1904     1905     1906	Bongal and Palana	₹ 314	  	::: ::: :::			18,231 22,420 27,832 21,689 28,369	11:59 11:98 10:84 11:27 12:39	5:55 7:36 6:13 5:30 8:02	4,981 120 152 155 163	4 34 4 38 3 62 3 90 3 71	4·34 4·38 3·62 3·90 8·71	47·63 52·50 59·31 51·51 48·96	45:42 49:61 55:34 48:39 45:57	1,060·85 1,048·95 1,187·75 876·54 806·95	246.73	
9	M. R. W.	1902 1903 1904 1904 1905 1906	Bongal.	†386 29 †386 445 †386			:::	:::::::::::::::::::::::::::::::::::::::	1,622 1,511 1,777 1,796 1,419	23.74 21.20 17.51 18.34 17.25	12:35 11:04 16:25	21 80 53 62 23	7·50 10·66 8·27 4·77 10·89	10.66 8.27 4.77	24-25 24-27 24-26 32-47 34-05	23.32 23.06 31.55			† This distance is by rail; the distance by sea is 637 miles.
g)	R. M.	1902 1903 1904 1904 1905 1906	Bongal and Singa- roni.	722 725 702 780 803	  				113,360 95,725 109,754 134,200 145,037	16.57 15.79 14.39 14.15 15.26	5 74 6·03 4·20 4·03 4·77	2,183 2,615 2,481 2,055 1,126	5.00 5.00 5.00 5.00 5.00	5.00 5.00 5.00 5.00	37:60 38:08 40:27		474·48 496·38 495·11	164-80 161-48 169-90 171-85 174-21	
(g.e)	R. & K.	1903 1903 1904 1904 1905 1906	Bongal	677 677 606 605 612				æ/ ::: :::	2,068 1,792 1,719 8,942 8,749	13-52 11-46 13-63 11 03 10-85	3 00 2 85			3 18 3·27 8·47 2·94 8·49	80.91 32.25 48.99	25-98 25-25 126-28 34-79 36-55	613.87 633.13 791.75	183.30	
000	P. W. L.	1902 1903 1904 1905 1906	Bengal	655					  24	11 03	2:35	1,440 1,226 1,400 1,308 1,520		8.05 8.26 8.59 8.56	21.31	19:91 17:81 19:96 19:41 20:74			
1	g. I.	1902 1903 1904 1905 1906	Bound and Singa roni.	. 63 82 83 81 79	  24			:::	58,273 60,096 68,680 72,314 73,541	18·11 12·18 11·40 11·39 11·83	-	10,782 10,516 11,295 9,477 5,587	4 91		36·44 37·71 38·21 36·90 36·36	84·28 34·79 88·74	774-08	205.4	

## APPENDIX 27—concluded.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—concld.

T				S OF SU			DESC	RIPTI	ON OF NTITY (	UENO	MED.	A ACTUAND	ΛL				1 MI MO11	- 1	
	de App. 58.	Calen- dur.	(The name of the sour-	TANCE CA IN MII (The discrete from the	ARRIED LES. tance is t cither sources	, -	Ichi co  Cost p			AN COA	r		οου. Ου <b>σ</b> έιο	or ton.	quant roda at	ity of c iced in the est of coal i	on the roal, and terms of one to 2; ton vood)	onal ton	Remarks.
	By. system, vide		only.	of support of the of delivers of delivers of delivers of the Conl.	places orv to	Quan- tity in tous.	In- cluding freight.	Ex- cluding freigh 9	Quan- tity in tons.	In cludius freight	Er- cluding (roght,	Quan- tity in tone.	ln- eloding freight,	Ev- eleding freight	Per train mile.	Por ou- gine milo,	Per 1,000 freight ton mile:	Per 1,000 gross ton miles.	
	2	3	4	 5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
)		1903   	England Singa- reni and Bengal.	408 351 316 316	96 74 72 82 79	"i33 " 2,418	18 88  18 08	Rs. 18:88	38,506 18,492 40,327 43,125 53,037	R4. 13:67 14:25 13:99 13:68 13:00	Rн. 5 25 8 40 8 30 8 95 6 38	62,422 65,629 69,209 70,137 74,743	Rs. 5 64 5 44 5 32 5 36 5 37	4.00	39 11 40 71 37 79 37 04 39 38		71 · · · · 9 718 13	215 09 219 75 201 83 200 65 211 10	
9			Dengar.		,														***
	U.	\[ \begin{pmatrix} 1902 \\ 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix} \]	Bengal. Warora & Moh- pani.	875 977 1,087 1,087 1,087		  			893 863 701 762 906	18:23 18:71 19:00 19:00 19:00	4:62 3:65 2:25 2:25 3:75	3 4  11 10	4:36 7:00 	7 00 :::	38·50 37·37 30·32 31·91 37·09	35 02 26 51 29 88	942:41 1,438:32 1,551:44 1,117:8 1,033:95	192:23 207:76 185:59 167:86 177:89	
	L	(1902)   1903     1904 }   1905     1906	Singa- reni.	{ "441  "273	  	  	:::		 77  159 289	14·50	5 50 	655 566 790 742 1,102	5·00 4·97 6·19 6·19 7·10	5 30 4 97 6 19 6 19 7 19	31·90 40·75 64·59 10J·82 43·65	39-32 92-82 99-93		66₫00  	
,	c.	{ 1905 } { 1906 }	:::		::.	:::	• :::		123 215	17·25 18·00	, 	2 3	24·50 21 50			61·16 29 71	3.76	3 85	
0	K. S.	\begin{pmatrix} 1903 \\ 1904 \\ 1905 \\ 1906 \end{pmatrix}	Bongal	1,021 1,018 1,016 904	 	 			238 5,166 5,189 4,917	20:00 21:00 17:50 18:15	2·25 2·25 2·25 4·00	144 13 3	12 19 	14 00	46:43 69:46 71:18 77:20	59 97	7,984:98 6,500:13 5,407:71	1,185-26 942-22 893-18	٠ 'و
2	В. Р.	1902 1903 1904 1905 1906		126 157 157 157 157 157	  		=======================================		979 960 1,083 1,128 1,428	5:39 5:86 4:44 4:33 4:24	2 03		  		25 20 25:27 26 92 28 53 34 24	24 10 25:37 26:92			
3	Т. В.	1902 1903 1904 1905 1906	1	{ ::: { :::		::- ::- :::		   	398 523 580 643 673	11 81 13 0 13 50				   	26:76 05:40 38:52 38:85 40:41	-			
35	Д. Н.	1902 1903 1904 1905 1906	Bengal	{ : : : : : : : : : : : : : : : : : : :		#: ::: :::				7.84	3·12 2·50 2·25		:: :: ::		40 81 58:23 41 22 44:68 46:08	53 28 40 83 44 68			*12 miles from Siean Ghat to Jorhat; Invice from Ledo Moriaul.
38	J.	1903 1904 1905 1906	/1	{ 11 12 12 •		::- ::- ::-			778 590 861 946	13 61			\	:: ::	88·15 34·61 35·90 41·76			:::	t Excluding the Bui tiarpore-Behar, Ra ghat-Krishusgar, Thaton-Duylozaik, Howrah-Auta
	To-				:::	21,469 17,439 17,439	<b>3</b>		2,091,99 8,203,68 2,447,84	S	:::	402,444 497,18 395,29	5	===	===	:::	:::	:::	Ifowrah-Sheakhala Light ratiwaya, ‡ E x o l u d i n g t Bukhtiarpore-Beha Tiratén-Duyi n ia Howrah-Amta
	TAU	1905		  -  -	:::	18,23 37,28			2,668,42 2,878,28	 11	*	253,09 248,22		:::	=	:::	:::	::	How ra h Sheabh Light railways.  SEcoluding the D shur and Baraseb- Basirand Baraseb- Basirand Baraseb- the railways named the remark 1

## APPENDIX 28.

## Coal mined in India during the calendar years 1885 to 1906.

		·,		QUANT	ITY MIN	ED IN E	си Р	BOVINCE.		_			Quantity	QUANT INDIAN C PORTED	OAL RX-	QUANT FOREIG	N COAL
YEARS.	Bengal.	Central Prov- inces.	Assam.	Contral India.	Nizam's torm- tory.	Punjah.		Balu- chistan.	Raj- puta- na (Bika- ner).	Mad- ras.	Bur- ma.	Total.	of Indian coal con- sumed by railways in India,	Fo Indian ports, excluding Burma.	To ports outside Indis, includ- ing Burma	From United King-dom.	From other countries.
885 .	Tons. 1,123,700	Tons. 119,116	Tons. 43,707	Tons. 7,698	Tons.	Tons.	То <b>п</b> ч. 	Ton4,	Tons.	Tons.	Tous.	Tons. 1,294,221	Tons. 486,716	Tous.	Tons. 500	Tons. 778,613	Tons, 40,659
886 .	1,186,902	117,287	70,859	13,539								1,358,187	470,075		199	698,492	41,652
.887 .	1,319,090	126,981	89,302	15,197	3,259	7,528		411			e.	1,561,063	488,774		315	786,149	43,019
<b>8</b> 88 .	1,380,594	157,768	101,528	41.580	13,082	11,249	,	2,802				1,708,903	551,770	zilable.	15.796	785,776	20,463
889 .	1,541,356	144,165	110,676	52,956	59,616	22,835		8,208				1,916,172	715,240	is not av	89,972	717,024	52,190
.890 .	1,620,245	137,022	145,708	77,812	125,486	10,677		15,511				2,168,521	654,829	Information is not available	26,336	631,725	21,827
891 .	1,717,122	141,736	154,208	69,741	111,668	60,714		10,368		20	<b></b> .	2,328,577	797,112		4,515	726,069	17,844
.802 .	1,920,050	132,005	164,050	88,623	119,601	66,352		13,284		61	3,670	2,537,696	865,492		15,725	628,371	23,123
. <b>89</b> 3 ,	1,902,866	135,118	161,120	91,318	157,121	77,294		20,691		502	9,938	2,562,001	924,900		52,302	616,319	18,06 <b>6</b>
864 .	2,035,934	140,195	169,418	102,807	240,525	66,467		21,753		1,297	12,111	2,523,907	1,062,748	143,813	154,082	675,043	57,112
895 .	<b>2,716,</b> 155	122,776	172,717		292,915	72,493		25,158		1,737	17,289	3,540,019	1,119,621	162,276	211,407	773,675	15,458
896 .	3,037,920	131,629			262,681 365,550	79,017 92,792		26,257 12,043			11,472			389,812 731,742		524,420 210,257	93,212
898 .	3,622,090				391,622			13,372	511		6,975			737,689		297,076	31,209
899 .	4,035,265	156,576	225,623	164,569	401,216	81,835		15,822	4,240		8,103	5,003,260	1,560,771	672,311	167,306	406,451	112,064
900 .	4,078,492				169,291			23,281	9,250		10,228	6,118,692	1,858,061	1,030,709	711,974	91,710	48,939
1901 .	<b>5,487,</b> 585 <b>6,259,3</b> 96				421,218		1,060	24,656	12,094			6,635,727 7,424,402		1,157,892 974,602		112,519 198,574	79,108
1903.	6,861,212		239,328		362,733	43,704	999	46,909			9,806			1,235,318			30,429
1904 .	<b>7,063,68</b> 0	139,027	266,765	185,774	419,546	45,594	270	49,867	15,078		1,105	8,216,706	2,417,311	1,447,867	893,885	<b>*</b> 17 <b>6,</b> 703	*77,169
1905 .	•7,234,108	147,265	277,065	157,701	454,294	62,622		*41,725	42,964			*8,417,799	2,668,424	1,635,268	1,144,650	147,760	50,024
.906 .	†8 <b>,096,39</b> .1	92,848	285,490	170,292	467,924	73,000		42,164	32,872		1,223	19,261,714	2,878,281	1,630,798		190,215	27,150

Revised.

## APPENDIX 29.

## State Collieries worked by Railway Companies or by the State.

Pa	eticulars,	Kurhu Al Seran	ND UN	WAR	ORA.	Мон	Pant.	Dan	DOT.	Кн	08T.	PRE	Anpur 88kd Actory,	Remarks.
	•	1905.	1906.	1905.	1906.	1905	1906.	1905.	1906.	1905.	1906.	1905.	1906.	The second secon
Nac	ne of owner .	East In rail	dian way.	Sta	te.	Great Peninsu wa		North State	Western railway.	North State	Western railway.	€rn	West- State way.	, «
Çap	oital outlay Rs.	22,31,832	22,85,521	13,24,899	12,54,360	6,58,458	7,02,912	2,13,486	2,03,177	3,05,815	3,05,769	50,701	72,618	East Indian railway.— Capital outlay is approximate and is
	Large coal . Tons	512,150	810,0 <b>44</b>	93,806	21,711	19,192	24,21	28.624	28,917	4,959	852			made up of the purchase money, Rs 8,05,154, which represents half the original cost of
14	Small coal. Tons	19,226	20,060	29,709	7,613			25	140	296	73	•		buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital ax-
Output	Fluck coul . Tons	86,628	87,875	ģ		•3,806	#8,293	14,513	11,571	28,885	31,575			penditure incurred from 1st January 16.0.
	Total. Tons	618,004	623,979	. 123,015	32,3.7	22,998	27,503	43,162	43,661	34,140	32,590	6,142	6,541	in the capital outlay in 1908 was due to sinking fund credita. The wiking of the colliery has been abandoned from 1st May 1908.
Qu	entity issued Tons	627,020	649,959	122,843	32,498	23,388	25,944	43,162	43,661	24,140	32,500	0,162	6,541	Mohpani.—Purchased by the State with effect from the 1st July 1904.
Gro	es earnings Rs.	11,20,509	10 81,339	5,67,546	1,77,470	1,16,059	1,44,457	3.25 <b>,4</b> 04	3,40,218	3,01,444	2,73,610	€8,426	75,383	Dandot.—The decrease in the capital outlay in 19:6 was due to depreciation on the cost of works a mulet dup to the end of the year and to a reduction of the Stores Impres Account.
We	orking ex- conses , Rs.	11,20,800	10,81,339	3,80,477	1,30,513	1,68,915	1,77,997	3,21,843	3,45,7(9	2,93,050	2,95,882	67,075	71,149	Khost.—The decrease in the capital outlay in 1906 was due to the thirgs for capital outlay being exceeded.
Net	t carnings or			1,87,069	46,927	-52,750	-33,510	3,561	-5,191	8,391	-21,772	1,551	4,073	by annual deproof ation.  Haranpur.—The de- crease in the capital
Per	rcentrge on apital			14·13	3 65			1-66		2.75		1.67	5 61	outlay in 1:06 was due ont rely to the amount written of for d. preciation.  *Splint coal.
	erage number I persons em- loyed daily.	8,370	6,800	987	413	<b>68</b> 0	200	, 1,860	1,840	719	701	7	12	
	umber of tons mised per per- son employed.	74	90	125	78	84	35	32	33	48	46	3	1	
No	mber of persons killed.	1	1					1		5	5			
Ne	amber of per-	10	10	٠	2	1	1		•	1	1			*

## APPENDIX 30.

Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906.

	Acrid report Loca Govern anders	ed to d ments	Mic Marie Augles By		Tot		(Fig.	ir. s in oppuse	nuce. italic	were			Nom:	BER OF			Total, olab		
<b>Б</b> ысевтергом.	83 of In 5 Rad- Act, I 1830,	the an ways X of r.e	Othe acoide		numbe: accide	rof	Kill	ed.	Inje	red.		Killo	d.	Inju	red.	Kill	ed.	Injur	od.
	1905	1906.	1905.	 1906.	1 9(5	1906.	1905,	1906.	1905.	1906.	19	005.	1906.	1905.	1906.	1905	1006.	1905.	1906.
1. Collisions between passenger trains or parts of passenger trains.	5	5	4	6	ย	11		1	50	24	•		3	5	6		4	35	30
2. Collisions between passenge trains and goods or mnoral trains, orgines, and vehicles standing foul of the line.		40	31	26	51	€6	1	3	63	{ 7	7 }	1	7	34	36	2	10	67	117
3. Collisions between goods trains or parts of goods train	11	20	57	71	63	91	1		4			1	8	36	31	2	8	40	81
4. Collisions between light engines	3	1	32	43	::5	41						2		5	5	3		5	5
5. Passonger trains or parts passonger trains leaving the rails	of 10 . 74	74	83	79	158	153				5 1	7		1	10	4		1	15	21
6. Goods trains or parts or goods trains, curines, etc leaving the rails.	. 1	7 9	365	385	<b>5</b> 72	394		1			4	,		5	4		1	5	8
7. Trains or engines travelli in the wrong direction through points .	21	9 11	85	143	97	154			1	7	.			6	1			23	1
8. Trains ranning into statio or sidings at too high a spec	ns d	5 4	27	24	32	25				7	.		3	3			3	10	
9. Trains running over eattle on the line	o 1	4 6	3,274	3,632	3.288	3 ,63	8			6	5	1		2	:	1	1	8	6
10. Trains running over of structions on the line	1	5 18	. 165	162	180	180	) K	1	1 6	1	15 12	} 2		1		4	6 9	,	31
11. Trains running throug gates at level crossings	th.	1	27	35	28	3	5		3			•••				2		3	2
12. The bursting of boilers engines	of		2		2				1.	.   .	.	•••				-		-	
12 (a) The burnting of tall etc., of engines	os,	1	296	3 28	299	28	8							-				-	
Carried over		165 18	38 4,45	4,89	4,61	9 5,0	32 {	2 4	6 1	22	137 21	<b>~</b>	7 5	4 8	7 * 6	24 1	3 8	9 28	4 25

## APPENDIX 30-concluded.

Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906—concld.

	repor	ection	1	her		otal .	(Fig	AND O ures in ot pas	THERS italios	were			ER OF	•		Tora	L OF A	LL
Description.	Ind Rail Act, 1890,	ian ways IX of ie,		lents.		er of louts.	Kil	led.	Inj	ured.	Kil	lođ.	Inj	ared.	Kil	led.	Inj	ared.
	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906,	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.
Brought forward .	165	188	4,454	4,894	4,619	5,082	$\begin{cases} 2\\ 4 \end{cases}$	6	122 15	137 21	} 7	24	97	94	13	89	234	252
13. The failure of machinery, springs, etc., of ongines .	3		813	756	816	756			,		1	1	1		1	1	1	
14. The failure of tyres .			13	5	13	5			<b></b>			<b>.</b>		3				3
15. Ditto of wheels .			7	16	7	16	-					•						
16. Ditto of axles .	10	6	59	71	69	77								1				1
17. Ditto of brake apparatus .		1	4	6	4	7												
18. Ditto of couplings	2	6	330	353	832	359				29		1	5	4		1	5	33
19. Ditto of tunnels, bridges, via- ducts, cul- vorts, etc .			4	3	4	3				<b></b>	•••	•••						
20. Broken rails	1	1	158	130	159	131							1				٠	
21. The flooding of portions of permanent-way	39	86	106	158	145	194												
28. Slips in cuttings or on- bankments	7	10	55	64	62	74				1	2	1	1		2	1	1	1
33. Fire in trains	2	3	, 209	150	211	153	1	3	1	2		• 1		1	1	4	1	8
24. Fire at stations, or involving injury to bridges or viaduets	2	10	57	<b>5</b> 2	59	62	1	2			<b></b> .	3	1	5	1	5	1	5
25. Other accidents	18	31	605	721	628	752	<i>.</i>		17	{ 25 1	} 5	8	9	40	5	8	26	66
Total .	,249	292	6,874	7,379	7,123	7,671	<b>3</b> 5	9 11	140 15	194	} 15	89	115	148	23	59	270	864

Numerical return of servants of all races employed on each railway system (open lines only) and

N	UMBER.		- 1			Number	· OF BEST				
	OMBEN.	RAILWAY SYSTEM.		Europe	a.ns.	Eurasi	811A.	Nati	¥68.	Tota	ıl.
nin ad.	Sub-head.	(Vide Appendix 38)		1905. Rovised.	1906.	1905, Revised.	1906.	1905, Revised.	1906.	1905, Revised.	1906.
1		Bongal-Nagpur		417	545	754	726	23,757	28,494	24,958	29,765
2	(a) to (f) & (n) & (o).	Bombay, Barods and Central India		297	229	271	217	15,783	16,384	16,291	10,880
3		Eastern Bengal State		327	379	411	517	26,752	30,516	27,490	31,412
4		East Indian		1,506	1,531	1,026	1,064	76,497	82,221	79,029	84,819
5		Great Indian Peninsula		1,103	1,138	998	971	65,617	67,710	67,718	69,810
6		Madras	· .	268	308	1,616	1,666	24,886	25,667	26,270	27,641
8		Nizam's Guaranteed State		72	90	382	390	7,634	7,854	8,088	8,334
9		North Western State		883	986	718	743	61,660	64,357	63,266	66,090
10	***	Oudh and Rohlkhaud State		317	322	359	311	21,273	21,860	21,949	22,49
11	,	Assam-Bengal		85	84	95	103	5,774	6,311	5,954	6,19
12		Bengal and North-Western .		166	173	195	237	20,022	21,779	20,383	22,18
13		Bengal Dooars		4	4	4	4	1,170	1,167	1,178	1,17
14		Bhavnagar-Gondal-Junagad-Porbar	ıdar .	9	7	30	30	2,661	2,742	2,700	2,77
15		Burma		200	160	636	607	13,673	15,105	14,498	15,87
16	·	Deoghur				1	1	66	66	67	20,0
17		Dibru-Sadiya		9	9			983	1,053	992	1,06
18		Jodhpur-Bikaner		11	11	6	4	3,515	3,771	3,532	3,78
19		Morvi		1	1	2	2	388	388	391	39
2	(g) to (m)	Rajputana-Malwa		444	462	684	513	28,072	28,154	29,005	29,12
20	,	Bohilkund and Kumaon		27	25	19	34	3,450	3,571	3,496	8,62
21		South Indian		157	158	748	717	15,028	15,143	15,933	16,0
22		Southern Mahratta		188	170	422	459	15,003	15,358	15,613	15,9
28		Udaipur-Chitor		2	2			369	362	370	8
24		Baraset-Basirhat Light				1	1	109	153	170	1
25		Barsi Light		2	2	4	6	}	1	1	8
26		Bukhtiarpore-Behar Light .		1	1			111	115	112	1
27		Cutch		1	1	i		55	55	56	
30		Kalka-Simla		16	17			312	325	329	8
82		Tarakeshwar-Magra Light .				1	1	225	228	226	2
88		Tezpore-Balipara Light		. 2	2	2	2	188	190	192	1
85		Darjeeling-Himalayan		24	24	10	8	865	891	899	9
86		Howrah-Amta Light		. 5		1	1	870	445	376	4
87		Howrah-Sheakhala Light .				-	-	104	95	104	
31		Jornat	•	. 1	1			214	225	215	2
									-		
	1	Тота	L	6,529	6,850	9,181	0,38	436,329	468,108	452,033	479,2

DIX 31. \* the amounts deposited by them in the Provident Fund at the close of the calendar year 1906.

	And	OBTIBOGED TRUC	IN PROVIDENT	Fund.		
Number of	depositors.	Amour	nt at credit on th	e 31st December 1	905.	Remarks.
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
		Rs.	· Rs.	Re.	Rs.	
286	4,338	1,99,773	12,12,186	9,22,107	23,34,066	
2	8,119	26,549	17,22,852	18,14,663	95,6 <b>±</b> ,064	Excludes the Provident Fund transactions of the Godhra-Rutlan-Nagda railway which are include with those of the Bajputana-Malwa railway.
175	5,938	25,000	14,35,741	12,35,708	26,98,449	
7,128	10,420				1,40,67,937	Amounts under voluntary and compulsory deposit and bonus given by the railway are not available.
3	8,057	1,027	1,03,78,634		1,0:3,79,661	The bonus given by the railway is included in the amount at the credit of voluntary and compalsor depositors.
117	6,510	1,30,543	19,57,419	15,90,157	36,78,119	maken and an an an an an an an an an an an an an
•••	1,440		6,01,902	5,45,136	11,47,038	•
449	8,941	1,00,269	35,50,260	31,88,433	68,38 62	•
148	3,302	31,351	10,08,543	8,63,411	19,03,308	
				·		
• **	1,122	•••	2,81,284	1,61,239	4,42,523	
10	2,294	. 69,161	8,70,907	8,21,083	17,61,156	
•••	180	•••	33,741	27,294	61,038	
170	479	35,874	2,05,640	1,50,087	3,91,601	,
•••	9,038	***	9,66,962	7,71,060	17,38,022	
***		M	***	"	***	
33		6,577	91,009	81,933	1,79,609	
	396 77	0,071	19,415	2,801	22,216	
	• "	•	•	•	*	Information not available owing to destruction records by fire.
1	564	128	1,71,078	1,46,872	3,18,068	
22	1	8,048	12,33,921	7,05,838	19,47,807	,
	3,768		13,92,399	1	20,98,811	
***	38		7,710	3,596	11,306	
					·	
***	19	, 	993	840	1,833	ù
•••						
***	18		1,553	1,133	2,686	
•••						,
1	L 160	. 50	7,510	6,908	14.474	
***					011919	
•••	145	1	1,34,930	i	2,11,842 19,660	
***	86	(	19,541 2,260	1	3,731	
1	.* 12 0 80		1	1	11,589	
8,55	5 67,482	6,85,888	2,73,09,84	1,38,34,974	5,58,47,606	

## APPENDIX 32.

## Number of men enrolled in Railway Volunteer Corps on the 31st December 1906.

	1			ENR	OLLED SI	RENGTE	t.			
Nυ	MBEB.	Corps.	I	EFFICIENTS.			of volun- teers of all nation-	and Eurasian	Sergoant Instruc-	Remarks.
Main head.	Sub- head.		Officers.	Non-Com- missioned officers.	Volun- toors.	Non- officients.	alities in corps, including servants on con- struction work.	servants on open lines of railway.	tors fur- nished by the Army.	
1		Bengul-Nagpur	36	118	1,012	22	1,188	1,271	10	
2	(a) to (f) & (n) & (v)	Bombay, Baroda and Central India— First Buttalion, Bombay, Baroda and Central India Ractway Volunter Rifles	· I	92	442	3	555	146	5	
3		Enstorn Bongal State	18	94	712	10	637	896	١،	
4		East Indun	76	207	2,097	36	2,416	2,598	* 18	
5		Great Indian Poninsula— Frest Battalion, Great Indian Pen insula Railway Volunteer Rules	47	193	1,261	11	1,512	2,109	18	
6		Mndras	. 4	197	1,286	32	1,560	1,974	12	
8		Nizam's Guaranteed State— Hyderabad Volunteer Rifles		23	152	30	218	480	3	
9		North Western State	. 4	140	1,031	59	1,271	1,729	12	
10			. 1	5 74	433	10	532	<u></u>	4	
		Ondh and Rahilkhand Raduny R		2 6	59		6	633		
11				1	1	. 1		ľ		
11			1	8 27	223		26	3 187	3	
12		Bengal and North-Western - Bengal and North-Western Railwa Volunteer Rifles  United Provinces Light Horse, Gora.	2	2 45	260		32	7 } 410	5	
16		pur Squadron  Bhavnagar-Gondal-Junagad-Forban		2 7	35	5	4	5 )	9 1	
•		dor - First Battalion, Bombay, Baroda an Central India Radway Volunte	id	1 7	7 29		3	o 3	7 1	
1	!		:	28 8	631	5 2	8 72	4 76	7 9	
3:	9	Morvi— First Baltalion, Bombay, Baro and Central India Railw Volunteer Riflex, F. Company			1	1		2	3	
	3 (y) to (n	1) Refigutaus-Malwa— Second Battalion, Bombay, Baro and Central Iadia Railw Volunteer Rifles	da ay 	29 9	1 65	6	7 78	33 97	5 11	
2	0	Rohilkund and Kumaon- Bergal and North-Western Railw Volunteer Rifle Corps	ay		2 8	2	2	36 4	19 1	
2		South Indian		27 7	2 50	8	5 6	07 8	75 8	
\$		Southern Mahratta		25 13	60	8	7	63 63	29 7	
1	23	Udaipur-Chitor— Ibmbay, Baroda and Central In Railway Volunteer Ryles	dia		1	1		2	2	*
	32	Tarakeshwar Magra — East Indian Railway Volunteer R	ifles			1		1	1	
	35	Darjeeling-Himalayan— Northern Bengal Mounted Ri "A" and "B" Troops	tles.	1	3	18		17	83	
	l	Total		457 1,6	19 11,4	79 8	18,8	05 16,1	04 12	8

## APPENDIX 33.

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged, for the calendar year 1906.

יטאנ	eber.				Pobrios	OF THE TO	OTAL ANNI RE BAILWA	JAL COST	Cost of	Compen- sation payments	,
Main head.	Sub- head.	Railwarmstem. (Vide Appondix 38.)	Subordi- nate officers.	Consta- bles and men.	Supervi-	Consta- bles and mon.	Contin- guacios.	Total cost of force to the railway.	force to the railway per mile open.	on account of claims for goods lost or damaged.	Rumanus.
			Average No.	Average No.	Rs.	Rs.	R	Rs.	Rs.	Ra,	
1		Bengal-Nagpur	15	836	17,953	59,554	4,953	82,460	40-16	48,387	
2	(a), (c) to (f) & (n) &	Bombay, Baroda and Central India.	79	578	28,051	63,939	7,625	99,615	115-86	44,334	
8	(o)• 	Eastern Bengal State	100	<b>97</b> 6	780	75,401	85	76,269	57:41	1,63,695	
4		East Indian	78	2 105	61,395	1,58,638	49,557	2,66,290	110.49	73,672	
5		Great Indian Peninsula	38	1,660	68,607	1,41,539	21,351	2,31,557	77 26	1,03,657	•
6	*	Madres	23	<b>78</b> 3	14,506	89,091	9,674	1,13,271	71:10	6,854	,
, 8		Nizam's Guaranteed State .	3	391	17,634	40,011	4 200	61,843	83:27	1,330	, š.
9		North Western State		1,563		1,50,992	1,116	1,52,108	35 31	1,45,271	
10		Oudh and Robilkhand State .	9	659	5,728	47,752	1,742	55,223	41.70	20,537	
11		Assam-Bengal	5	229	8,603	17,767	1,814	29,184	36:56	3,020	
12	•••	Bongal and North-Western .	20	655	3,130	59,754	1,171	64,055	41:42	6,329	
13		Bengal Docars		10		1,06s		1,063	<b>6·9</b> 8	401	•
14		Bhavnagar-Gondal-Junagad-Por- bandar.	26	123	16,787	11,198	6,607	\$ <b>4,</b> 592	75.95	472	
15		Burms	87	480	29,937	75,697	18,109	1,23,743	92.31	16,229 *	
18		Jodhpur-Bikaner	3	41	1,869	4,217	614	6,700	8.04	6,072	
9	(b) & (g) to (m).	Rajputana-Malwa	117	1,022	37,200	82,443	10,142	1,29,885	59·55	59,947	
19		Morvi	6	14	<b>65</b> 8	5,695	240	6,533 <sup>.</sup>	69.66	22	
20		Rohilkund and Kumaon .	12	172	1,741	13,548	1,487	16,776	47:27	1,207	
91	-	South Indian		247		71,953		71,953	52-89	5,066	
22		Southern Mahratta	14	753	92,790	87,916	8,750	1,19,486	71:47	8,619	
25		Barsi Light	1	7	256	772	25	1,058	13:41	58	
80		Kalka Simla	1	44	, 829	2,901	40	8,270	55:01	682	

APPENDIX 34.

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Transactions of the Fine Funds for the calendar year 1906.

Non	BER.			Assets.					Dishursem:	ENTS.			appea
fain	Sub- head.	RAILWAY SYSTEM. (Vids Appendix 38.)	Balance on 31st December 1906. (Revised.)	Fines and bonus for- feited during 1966.	Interest on balance.	Total.	Hospitals for aick em- p.oyes.	Compassionate allow- ances.	Schools.	Recreation clubs.	Miscellaneous.	Total	Balance on Sist December 1906.
			Rs.	Rs.	Re.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Re.
1		Bengal-Nagpur	28,718	18,439	745	47,902			1,235	4,800	6,595	12,130	85,772
2	(a),(r)to (f) & (n) & (o).	Bombay, Baroda and Control India	2,622	5,890	64	8,576	107	607	240	860	5,622	7,436	1,140
8		Eastern Bengal State	12,878	10,501	392	23,771		242	8,510	6,183	1,659	11,594	12,177
4		East Indian	1,06,719	16,481	3,072	1,26,272		238	2,319	18,035	24,420	45,007	81,265
5		Great Indian Peninsula	16,641	15,829	594	33,061		4,667	1,120	2,432	15,330	22,949	10,112
6		Madras	1,06,978	10,454	4,100	1,21,532	105	10,327	2,759	114	17,380	159,08	90,848
8		Nizam's Guaranteed	9,410	6] 2,584	331	12,325			120		772	8,2	11,438
		State											
9		North Western State	17,446	21 993	594	40,033		148	8,165	10,704	3,863	28,180	16,853
10	***	Oudh and Rohilkhand State	8,309	10,083	275	14,667	•••			609	8,537	4,116	1 14,521
11	•••	Assam-Bongul	9,662	10,753		20,115		130	661	3,810	7,193	11,800	8,615
12		Bengal and North- Western	90,083	13,878	1,4°4	1,05,445		68	1,125	1,593	<b>5</b> ,186	7,967	97,478
13		Bengal Docars	1,618	657	41	2,316			14.2	505		647	1,669
14		Blavnagar-Gondal-											,
		Junagad-Porbandar	6,120	694	196	7,210		100		639	673	1,412	5,798
15	-	Burms	6,999	20,758	•••	27,757		50	2,571	7 369	13,095	23,065	4,672
18		Jodhpur-Bikauer .	6,810	2,724		9,534			2.5	730		9:8	8,576
19 <b>2</b>	(b) & (g	Morvi	1,549	45	 To former	1,594	 available	114 owing to	dostructic	n of renor	5 de by fir	1:9	1,475
•	to (m)				Imorna	tion not	" Aftirent.	ewing to		. 01 1000			
20		Rohilkund and Kumaor	29,549	3,019	083	33,581			•••	940		940	32,641
21		South Indian	1,48,048	6,970	4,390	1,60,008	153	925	561	8,893	1,330	11,865	1,48,148
22		Southern Mahratta .	1,766	4,653	39	6,4:8	9	200	1,291	2,425	475	4,400	2,058
28		Udaipur-Chitor	310	C8		417							417
24		Baraset-Basirhat Light		78		78			<b></b>		79	78	
26		Bukhtiarpore-Behar Light	]	31	Ì	84					34	34	411
80		Kalka-Simla	547	396		943				210	23	263	68
33		Tarakeshwar-Magra Light	<b>.</b>	13		18	13					13	_
88		Tezpore-Balipara Ligh	1	67		83		`	56			. \$6	2
85		Darjeeling-Himalayan	196	108	***	299				150	27	177	12
36	i	Howrah-Amta Light		223		223					223	228	
87		Howrah-Sheakhala	Î								_		
	ĺ	Light		39		89				•••	89	89	

## APPENDIX 35.

## Railway and Railway Aided Schools at the close of the calendar year 1906.

	1			RAILWAY SCHOOLS.											BAILWAY AIDED SCHOOLS.					
NUEBER.		Railway system. (Vide Appondix 38.)			ATTENDANCE,				Contributions.					Expen-		AVERAGE DALLY ATTEND- ANCE.		RAILWAY GBANT.		
				schools.	Children.		Apprentices and workmen		By	By Railway.		Ву		diture.	of rehools.		ban s	From	From	Remares,
Main head.	Sub-head.			Number of	Num- ber on the rolls.	age	Number on the rolls.	Aver- age daily atten- dance.	Gov- ern- ment.	From Reve- nue.	From Fine Fund.	fees. Total.		Number of	Chil- dreu.	Apprentices workmen.	Rove-	From Fine Fund.		
1									Ra.	Rs.	Rs.	Rs.	Rs.	Rs.				Res.	Rs.	
		B. S Euro	pean	6	241	156			4,127	3,500	400	4,853	12,580	12.232	3	63		900		
1	•••	N.   Nati		3	211	194				875	835	905	2,615	3,732			•••	. :		
2	(a)to	B., Enro	pean	3	79	58	6	5	526	3,260	165	2,375	6,826	6,22	18	62	•••	3,123		
- 1	(n)& (o)	0. 1. ( 11861)	′° .	2	10	7	18	16	239	89.3	75	225	932	883						
8	•••	E. SEuro					"					•••	1,081	1,081	13	109	27	2,449		
		B.S. (Nati		5	96	73	269	91		1,081	"	92,131	1,33,461	1,81,824	4	373 160		1,061	1,001	
4		E.I. (Euro	-	19 67	2 637	767 1,865	90	1,203	3,194	23,982 3.5°0	2,139	12,434	21,321	20,934	• ,	2:9		1.029	180	
		(Euro		5	253	210	3,166	1,203	i	12 9 13		2,678	19,223	19,223	8	76		3,613	163	
5	(a)	G   Nutin		Ů											12	434		2,373		
5	(b)	i. Euro		2	108	70				4 679	124	1,222	7,145	7,115	2	8		46		
	to (/)	М.			١.											1				
6	1	M. Euro	เรคาตุ	9	405	944			4,251	23,173	2,758	4,191	34,776	35 311	14	187		4,754		
8		N. (Enco	pean	2	78	60				1,668		139	2,207	1.819	3	139		510		
	(b)	S. (Nati	ve .	2	72	57	12	6	<b> </b> .	1,027		173	1,100	1,034	6	121		540	120	
		Euro	peau	2	87	67	18	12	2,259	2,651	749	710	6,399	6,663	18	105		11,148	3,992	In addition to thes
9		N W.																		grants from the Fir Fund, the North Wes ern State railway as contributed Rs. 2,7 for the "Oakgrou behool" at Siussoor
		Nati	vo .	25	1:0	98	2,339	493		5,293	160	278	5,736	4,811	١,	194	2	2, 08	707	Corned Bs. 68 to the Corned Orphanag
		O. (Euro		4	46	38	37	33	525	2,631		1,038	4,344	3,206	17	76		7,915		
10		R. Nati	vo .	3			91	33		362		•••	362	362	3	112		1,189		
		A. (Eur	opean	1	8	6			349	1,200	153	86	1,787	1,566						
11		B. Nat	i <b>v</b> o .									•••			2	35			<b>508</b>	
••		B. Euro	пива	2	70	61			1,:70	2,760	1.125	961	6,416	5,623						Ī
12		W. Nati	ive .	٠								•••			2	43	·	321		
13	···	B. D. Nat	ive .												1	18		··· .	1 42	
14		B. Euro	opean	1	1	16	•			996		598	1,394	1			•••			
41	] "	G.J. P. Nati		2	1	72	1			584		249	833	1	::		-			1
18	5	B. Euro		ł	1	45	i	1 .	2,010	75	675	1,476	4,236	1	1	33		423	423	
		(Nati		2			1.	16	2,444	415	1	2,214	6.268	I.	13	37		278	278	
17	1	D. S. Nati		1,	1		' '''			300	225	502	802 225	1	1					
18	<b>!</b>	H. (Eur		1 2	1	1	.			787	1	240	977	778						1
	3 (1)	v. Nati		1		i	1		***		"				ı	38		120		
	2 (g)	1		7	1	138	95	86	2,41	8,316	3,120	ł	13,129	1	1	65		180		
•	to (m	M. Nat	ive .	١,		1			1	586		2,245	5,238	1						
	`	S. I. Eur	opean	1		1	1	1	1,240	4,852		827	6,983	1					•••	
2	٠٠٠	8. I. { Nat	ive .	1		1	1		1:5	470	1	202	787	470					1	
		Eur	оревл	1	1	1	1		831	5,939		1,561	8,411	8,440	7	304			850	1
2	2 ···	S. Nat	ive .		181	150	103	85	156	1,050	250	1,093	2,849	2,516	1	108			111	
81		T. B. Nat	ive .	i			29	9		92	56		88	88				-		
		Total	•••	207	6,896	5,98	6,391	2,208	48,448	1,14,23	5 17,129	1,40,520	3,20,331	3,12,65	3 17	5 3,780	29	48,08	5 10,98	

# APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1906.

# INDEX.

Nom	den.	· · · · · · · · · · · · · · · · · · ·		Ngm	BER.		
Main hèad.	Sub- head.	Railway.	Page	Muin head.		Railway.	Page.
5 2 2 9 11 6	(b) (3,6,6) (c) (c)	Agra-Dolhi Chord	143 122 122 160 168 150	30 21 9 6 22 22	(a) (b) (k) (c) (q) (l)	K Kalka-Simla Kar ikkal-Peralam Khusisalgarh-Kohat-Thal Kol r Gold-fields Kolhapur Kurnool Boad-Kurnool	205 190 165 151 198 202
24 25 22 12 13 18	(c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Baraset Basirhat Light Bari Light Bollary-Rayadrug Bengal and North-Western Bengal Docars Bengal Docars Bengal Nagan	202 253 125 170 173 174 113	17 20 9	(b) (d)	L Ledo and Tikuk-Margherita Colliery Lucknow-Barerlly Ludhnana-Dhuri-Jakhal M	181 187 161
8 22 14 5 5 18 5 22 2 2 26 15	(b) (k) (a) (c) (d) (b) (e) (a) (u) (a) (b)	Bezwada Extension  Bezwada Missulipatam  Bhavnagar Good 1-Junaca-l-Porbandar  Bhopal-Itarai (British section)  Bhopal-Itarai (British section)  Bhopal-Ujjain  Bikaner  Birar-Shimo;a  Bombay, Racodu and Central India  Bukhtiorper - Hehar Light  Burma  Burma oxtensions	156 200 174 143 144 183 145 196 201 175 175	6 5 1 6 19 3 21 12	(a) (d) (h) (c) (j) (a) (c) (k (t)	Madras Madras (North-East line) Mathoran Light Wourblanj Morappor Dharmapuri Mory: Myween ngh-Janaspur-Jagannathganj Myscre-Nanjangad Mysore scotton (Southern Mahratta)  N Nagda-Mutira Nag-La-Ujjan	148 152 148 115 154 181 133 199 199
10 3 27	(c) (d) (d)	C Cawnpore-Borhwal (3' 32' gauge) link	169 171 20	: I	(e) (e) (v)	N Triri Nom's Guaranteed Stato North Western (State) Nowshera-Durgai	153 155 159 165
9	(j)	Dandot Light	169	7	(4)	Ondh and Rohilkhand (State)	106
35 4 16 28 14 17 29	(b) (c) (e) (b) (c)	Darpeling-Himalayan Delhi Umballa Kalka Deoghur Dhohau-Bari Dhi mwalrt Dibru-Sulva Dwara-Therria Light	20: 13: 17: 20: 17: 18: 20:	2 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	Palanpur Deesa Parl ikinedi Light Pet Lid-Cambay (Anand Tarapur section) Petial-Cambay (Tarapur Cambay section) Pordicle rry Powayan Light Parulin Ranchi	124 116 119 120 191 188 116
3		Eastern Bengal (State), Eastern, Southern and Contrasections (5' 6' gauge) Northborn, Behar, Dacoa and Kauma-Dhubrr sections (5' 3' gauge) Ranaghat-Krishnagar and Teest Kurigram branches and Britis section, Santrabari extensio (2' 6' gauge)	12 1 1 13 13	0 2 20 20	(e) (o) (v) (t) (d)	Ripur-Dhamtari   Lap pla	114 129 162 125 165
•		East Indian	: 13	٠ [	(i)	Salem-Attur	185
	(f) (a) (d) (b) (g)	Gackwar's Dabhoi Gackwar's Mohsma Godhra Ruthum-Nagda Gondin Chandis Greet Indian Peninsula Guntakal-Mysoro Frontier Gwalior Light  H	.   15 .   15 .   11 .   15 .   15 .   15	8 22 8 31 6 6 4 9 21	(m) (u) (f) (c) (u) (u) (d) (f)	Saught Sandra (Delhi)-Saharanpur Light Shor nor-Co-tim South Behar South Indian Southern Mahratta Southern Punjah Ludhiana' extension	155 203 206 153 138 168 168 194 163
1 2 2 3 8	2 (g) 6 (g)	Hardwar-Dohra Hindupur (Yesvantpur-Mysore Frontier) Hespet Kottur Howrah-Antt Light Howrah-Sheakhala light Hydorabad-Goduvari Valley	. 20	07 09 21 09 2 10 32 57 4	(d) (f) (e) (d) (a)	T Tanjore District Board Tapti Valloy Tarakeshwar Magra Light Tarkosau Tezpor:-Balipara Light	198 121 206 138 207
	5 (r)	Indian-Midland	. 1	34 21 46 21 15	383	Thaton-Duyinzaik Light Tinnevelly-Quilon (Travancore) (British section)  Tinnevelly-Quilon (Travancore) (Native State section Tirhoot Tiropattur-Krishnagiri	297 193 193 172 155
3	2 (j) 9 (c) 4 (d) (d) (8 (d) (8) (e) (3) (1) (b)	Jaumu and Kashmir (Native State section) Jammagar Jetalsar-Rajkot Jodhnur	. 1	24 60 76 2:	1	Udaipur Chitor	202
	9 (k)	Jodhpur-Hyderabad (British section) Joshat Jubbulpore-Goudia extension Juliundur-Kapurthalla-Sultanour (British section)		14	(m)	w	. 127
	9 (1)	Juliundur Kapurthalla Sultaupur (Native State se tion).	0-	66 2	2 (j)	West of India Portuguese	200

### APPENDIX 38.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 1}}{\text{Sub-heads }(a) \text{ to }(g)}$ 

### BENGAL-NAGPUR RAILWAY SYSTEM-

Chairman—Sir Samuel Hoare, Bart. Managing Director—R. MILLER, Esq.

Offices-132, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Bengal-Nagpur railway system is made up of-

•		Ope	Utder construction or sanctioned for construction.	
		• 3	files, Wilse.	Miles.
(a) Bengal-Nagpur railway	(5' 6" gauge)	1	399:50	1,782.08
East Coast (State) railway, Northern so	setion . (5' 6" gange)		3)1.93	311.93
(b) Jubbulpor :- Gondia Extension, Beng 11-Na	expuerallway (2'6' gauge)		215:05 45:62	290-67
(c) Mourbhanj railway	. (2' 6" gauge)		32.41	8:41
(d) Parlakimedi Light railway	(2′ 6″ gaugo)		24.63	21.62
(e) Bupur-Dhamtari branch, Bengal-Nagpur	r railway . (2' 6" gauge)		56.91	56.91
(f) Gondia-Chanda	(2′ 6″ gauge)		212.49	212:40
(g) Paralia-Rinchi	(2'6" gauge)		72.29	72.28
Running powers—	т	Total · · · · · · · · · · · · · · · · · · ·	053:53 729 80	2,783:33
			•	2011.
Homa line over Foreig:. lines :-		_		Miles.
At Katni, East Indian railway for passenger	or and goods trains .			\$ 0.30 \$ 0.50
	e trains only	tion, East, Coast (	State) railway for passenger goods train	1.00
			Total	7:43
Foreign line over Home line:— Great Indian Poninsula railway at Katni (for	or passenger trains only)			1.60
4 ( ) The seal We was a mail-sea (g/ g// seas.				

### 1 (a) Bengal-Nagpur railway (5' 6" gauge) —

### Details of construction-

The open mileage of the Bengal-Nagpur railway, 5' 6" gauge, amounts to 1,694:51 miles, which may be divided into (1) Bengal-Nagpur railway proper, main line (Asansol to Nagpur), 626:83 miles, branches, 755 75 miles; and (2) Norther, section of the old East Coast (State) railway, main line (Baraug to Waltair), 284:75 miles, branch, 27:18 miles. Of this 71:54 miles are double line. Besides these, 355:50 miles were under construction and 44 miles, Sini to Gurumaishini were sanctioned for construction but not commenced.

The construction of the first portion of the main line, Asansol to Nagpur, was sanctioned in 1884 and opened through in 1891. The Sini-Howrah section was opened in 1900.

Permanent-way.—The line is laid with 75-lb. and 85-lb. steel rails on transverse wooden, steel and cast iron po sleepers.

Ballast.—The line is ballasted throughout with stone, except for a few miles on the Chakardharpora district where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Baraug-Waltair section.

Curves .- On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri 1 in 200; and between Midnapore and Bhojndih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

### Terms of contracts -

The Bengal-Nagpur railway is worked under the following contracts:--

Contracts of-9th March 1887 .- Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpar Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2'6" gauge) feeder line with a branch to Rajim; an extension (5'6" gauge) from Sini vid Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields; a line (2'6" gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Chhindwara; and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

nΛ

The general conditions of the contracts are as follows :-

Government aid.—Free grant of land and guarantee of interest in sterling at 4 per cent. per annum on £3,000,000 share capital. On any further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon.

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Sub-heads (a) to (g). BENGAL-NAGPUR RAILWAY SYSTEM—contd.

1 (a) Bengal-Nagpur railway (5' 6" gauge) -concld.

Terms of contracts-coneld.

Currency of contracts:-

- (1) Principal contract.—Government may determine the contract by giving twelve months' previous notice on the 31st December 1913 or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line be worked at a loss. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay at par the amount of the share capital which has been paid in by the Company.
- (2) Sambilpur branch contract.—The contract for this branch brings it within the provisions of the original contract of 9th March 1887; but provides that the Government may purch so the branch at any time after 1st January 1895 on giving twelve months' notice.
- (3) Contract of 23rd January 1302: Northern section, East Coast (State) railway.—Government may, at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances, without compensation in respect of such retransfer.

Power of Company to surrender centract .- Fil.

Terms of working.— After deducting working expenses—which may include any single item of capital expenditure classed as a 'Minor Work,' up to Rs. 1,000 but not exceeding Rs. 2,000 at the discretion of the Consulting Engineer subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision—three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gress carnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, hear to the gross carnings of the latter section.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur railway stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company similarly has power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working - See page 115.

1 (b) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2' 6" gauge)-

# Details of construction-

The open mileage of the Jubbulpore-Gondia extension amounts to 245.05 miles, which may be divided into main line (Jubbulpore to Gondia), 140.94 miles, and branches, 104.11 miles. There are still 13.48 miles (Pench Valley railway) and 32.14 miles (Mandla branch), under construction. The construction of the line was sanctioned in 1901 and it was opened in July 1904.

Permanent-way .- The permanent-way consists of 41-lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted with stone, except between Seoni and Chhindwara where good black basalt has been used.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

Gradients.—The snarpest curve is of 400 feet radi

Oftotenes.—Into running grade

### Terms of contracts-

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working-See page 115.

1 (c) Raipur-Dhamtari branch: Bengal-Nagpur railway (2' 6" gauge)-

# Details of construction-

This branch is 56.94 miles in length and consists of the main line (Raipur to Dhamtari), 45.74 miles, and the branch (Abhanpur to Rajim), 11.20 miles. It was sanctioned in 1897 and opened in 1900.

Permanent-way. - The line is laid with 31-lb. flat-footed steel rails on sal sleepers.

Ballast .- Moorum or sand and stone in a few cuttings.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 409 feet radius, at Raipur station.

Gradients .- The ruling gradient of the line is 1 in 200.

# Terms of contracts-

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working.—See page 115.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 1}}{\text{Sub-heads (a) to (y)}}$ 

### BENGAL-NAGPUR RAILWAY SYSTEM-contd.

### Statistics of working-

[BE	NGAL-NAGPT BT COAST (	STATF) RA	TABLE T, INCLUDE LLWAY, TH RAIPUR-11	NO THE	3ULPO∈E-G	INDIA E	ON OF THE ETENSION			Т	ABLE II.	,			
year.	Capital outlay to end of cach year.	Gross carnings.	Not carnings.	Per- cent- age on capi	Interest.		Gain or lo-s to the State.	Nagpur-Cl 3/ 3	mttisgarh, gr.	Katni-U 5/ 6		Bengal- 5'	n) Nagyur, 6".	Jupper Jupper Goudia sion ar pur-Di branch	exten- d Rai- lamtari
Calendar	each year.			tal out- lay,		earn- ings.*		Earnings per mile per wook.	Pro : of exp : to carnings,	Farnings per mile per week.	exp. to	Earn- ings per mile por week.		Earn- ings per mile per week.	exp : to
1879	Ra. 28.62.090	Rs.	Rs.		Rs. 83,911	kiн.	Rs. -83,911	Ks.		Ra.		Rs.		Re.	
1830	55,49,511	1,03.952	28,215	0 51	1,58, 04		-1,30,580		79 54	:::		:::			
1881	73,65,710	2 81,529	65,056	2 09	9,62,932		-1.96,870	87	76.23			3			***
1892 1880	90,64,388 96,43,590	6,01,386 13,20,021	1,69,17) 6,83,860	7 09			-1,50,796 +3,10,577		68:70 48:19	l :::				.:.	***
1,5,7,7	20,40,000		10			•••	1		•						
1884	1,06,34,112	13,23,014	6,58,030	6·19 3·25	4,24,40 5,86,281	***	+ 2.33,620		57:82						
1885 1886	1,50,66,406 1,81,70,455	14,14 889 14,24,521	4,93,575 5,33,511	29+	7,29,5	•••	- 92.7c6 - 1.96.011		65:12	37	101:35				
1887	2,42,30,937	11 47,705	3,03,207	1.25	13,35,56 0		-10.32.356		59.09	1 41	116.11		1 :::		
1888	5.23,92,:91	16,09,195	5,62,971	1.02	22,17,583		-16,54,362					164	67:58		
1889	7,08,75,156	19,96,930	4,03,160	0.57	29,93 364		-25,93,203			1		131	80 09	ł	l
1690	8,11,66,762	28,61,578	5, 17, 163	0.02	53 8-,8 2		-28,41,380					101	80.89		1 :::
1891	9,09,01,161	51,57,356	26,81,153	5.00	35,05,676	•••	-8,21,225	4				129	50 81		، ا
1892	9,56,14,736	60,83,562	30,08.166	3.1.	39 05 34	•••	- 8,97,179		<u> </u>			111	₹0.55		
1893	9,80,08,121	64,17,751	32,62,220	3.33	43,97,191		11,35,574				• • • • • • • • • • • • • • • • • • • •	144	19:17		
1894	9,81,73,789	66 90,645	32,58,414	3 32	45,83 993		13,25,579			١		149	51:30	l	
1895	9,84,91,777	68,71,710	35 41,441				18,15,356			!		153	48 49		
1896	11,05,30,319	63,68,525	19,27,869 19,79,559	2.65 2.28	.8,27,501 51,35,240							142	54.03		
1897 1898	13,01,58,784 14,67,03,520	62,00,309 68,79,193	33,63,451	2 29			-20,50,532			1		138	51.10		
1000	,			1	' '	•	1		"				1	"	-"
1899	16,65,90,365	90,73,460	47,21,814				-12,54,079					152	47.98	1	
1900 1901	17,41,74,601 21,19,23,276		77,13 050 61 18,618	2.90		1 79 910	+ 12,22,413					207 161	40 56 52 68	25	72:13
1902	22,51,91,979			3 10		41,601			l ::			176	51 09	21	77.27
1903									}		:::	178	54 63	21	61.98
3901	02 14 95 480	1 00 10 105	05 67 0 10	3 67	05.41.004	355	+45,347	1	Ì	1	1	010	40,00	-	CB.CC
	26,14,35,433 +27,33,72,570						+33,71,731		1 :::	:::		210 270	48·97 44·53	31	67:32
	28,40,48,582									1		295	46.83	56	65.56
1	, . , , ,	1	1 -,,,,	1	1 , 1, 1,,	1 , .,,,	/ -	1	1	į	1	1	1	1	1 55 50

# 1 (c) Mourbhanj railway (2' 6" gauge)-

# Dotails of construction-

This railway is 32:41 miles long. Its construction was sauctioned in 1902 and it was opened in 1905.

Permanent-way. - The line is laid with 30-lb. flat-footed steel rails on sal sleepers.

Ballast .- The line is ballasted with screened laterite, gravel and broken laterite.

Fencing .- The line is unfenced.

Curves .-- The sharpest curve is of 955 feet radius.

Gradients,-The ruling gradient is 1 in 100.

# Terms of contract—

The line is worked under an agreement between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No. 223 R.T. of the 10th March 1905.

The general conditions of the agreement are as follows :-

Government aid.—Nil. The line is the property of the Maharaja of Mourbhanj.

Currency of agreement, -The agreement is terminable on 31st December of any year on three months' previous notice. Terms of working .- Actual cost.

Rates and fares. -To be fixed by the Company.

# Statistics of working-

		 				_								TA	BLE	I.							TABI	R II.
		 			-	•	Cal	end	ar ye	ar.					-				Capital ont- lay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.		Proportion of expenses to carnings.
		 _														,			Rs.	Rs.	Rs.		Rs.	
1905	•		٠.	٠.							•	•	•		•				6,21,895	81,494	7,422	1.19	20	76:48
1906			•			•	٠		•		•	٠	•	•	•		•	٠	6,94,892	44,825	21,888	3 15	27	51-17

Indudes the Gondla-Chanda and Purulis-Banchi railways.

# History of railways constructed and in progress. [For Index see page 112.]

 $\textbf{Number} \ \ \tfrac{\text{Main head 1}}{\text{Sub-heads (a) to } (\rho)}. \quad \textbf{BENGAL-NAGPUR RAILWAY SYSTEM} - concld.$ 

### 1 (d) Parlakimedi Light railway (2' 6" gauge)-

On the 20th May 1901 the Indian Railways Act, 1890 (IN of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902. Details of construction-

This railway is 24 62 miles long. Its construction was sanctioned in 1893 and it was opened in 1900. It runs from Naupada to Parlakimedi.

Permanent-way .- The line is laid with 30-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast .- The line is ballasted throughout with laterite, gravel and stone.

Fencing .- Short lengths of fencing have been provided in a few places where the railway in cutting runs alongside

Curves. - There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

### Terms of contracts-

The Parlakimedi Light railway is worked under an agreement, dated the 24th January 1905, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Raja of Parlakimedi.

Currency of agreement.—The agreement is forminable on 31st December of any year on three months' previous

Terms of working .- Actual cost.

Rates and fares .- To be fixed by the Company.

### Statistics of working-

												Тлі	te I							TABL	E II.
	····					Ca	- londs	r yes	r.						_	Capital out- lay to end of each year.	Gross	Not earnings	Per cent. on capital outlay.		Proportion of expenses to earnings.
1908 1904 1905 1906	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	Rs. 7,10,974 7,10,974 7,10,975 7,12,466	Rs. 16,683 20,675 27,181 21,493	Rs. 9,365 1.301 +4,481 9,703	 0.63	R <sub>S</sub> . 13 16 21 17	155 70 106:29 83:51 145:14

### 1 (f) Gondia-Chanda railway (2' 6" gauge)-

### Details of construction-

This railway, which runs from Gondia to Chanda (148.65 miles), with a branch from Pauni to Nagpur (63.75 miles), total length 212 10 miles, was sanctioned in 1904 and work was started in November 1905.

# 1 (9) Purulia-Ranchi railway (2' 6" gauge)-

# Details of construction -

Runa

This railway, which runs from Purulia to Rauchi (72:28 miles), was sanctioned in 1905, and construction was commenced in November of that year

#### Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM-Number Sub-hoads (a) to (a)

Chairman-Colonel Sir W. S. S. Bisser, K.C.I.E., R.E.

Secretary-Colonel W. V. Constable, R E.

Offices .- Gloucester House, Bishopsgate Street without, London, E.C.

Lines comprising the system—The Bombay, Baroda and Central India railway system is made up of—

										Open line.	Under construction	Total.
										Open mue.	or sanctioned for	
											construction.	
						_				Miles.	Miles.	Miles.
(a) Bombay, Baroda and Central	India re	ilway				્.{	35	6"	gango) 4	65 12 } 504 35	***	504.35
• • • • • • • • • • • • • • • • • • • •					-	ં (	(3'	81"	gauge)	39.23 )	•••	
(h) Godhra-Rutlam-Nagda railway	•	•	•	•	•	•	(5'		gange)	141-14	•••	141-14
(c) Nagda-Ujjain railway .	· •		• .				(5'		gauge)	34.32	•••	31:32
(d) Petlad-Cambay railway (Anan-	l-Tarap	nt sec	tion)				(5'	6"	gauge)	21.20	•••	21.50
(e) Petlad-Cambay railway (Taraj	nr-Can	bay w	eotio	n)			(5'		gauge)	12:30	•••	12.30
(f) Tapti Valley railway .							(5'	€″	gange)	155.48	***	155.48
(a) Ahmedabad-Dholka railway							(3'	34"	gauge)	33.20	•••	33.20
(h) Abmodabad-Parantij railway							(3'		gange)	54.70	•••	54.70
(i) Gackwar's Mohsana railway							(8'		gauge)	92.63	45.84	138.47
(i) Jaipur (Siwai-Madhopue) railv	73 <b>v</b> .				- 1	-	(3'	3,"	gauge)	32:18	40.65	72.83
(k) Palanpur Deesa railway		-	- 1				(3'		gauge)	17.28	***	17.28
(l) Rajputana-Malwa railway			- :	- :		•	(3'		gauge)	1,774.36		1,774.36
(m) Vijapur Kalol-Kadi railway	•	•	•	•	•	•	(3'		gauge)	41.37		41 37
(n) Cackwar's Dabhoi railway		•	•	•	•	•	(2'		gaugo)	94.49	•••	94.48
		•	•	•	•	•	(2'	Ξ		87·37	***	
(o) Rajpipla railway		•	•	•	•	•	(-	v	gauge)		4++	87 37
							Total			3.046'96	86:49	0.10=.45
							1 0.001	•	•	. 0,040 00	00 10	3,135.45
	•											
wers-											30.0	

	,		-	-
nit	ng powers—			
	Home line over foreigt, line — Dadar Junction to Carnae bridge, Great Indian Peninsula railway (for goods trains on	ly) .		Miles. 4.89
	Foreign lines over home line: East Indian railway, Agra East Bank to Agra Fort (for goods trains only)			1.00
	Great Indian Peninsula railway at Ujjain (for passenger and goods trains)	. •	• •	0.54
	" Dadar Junction to Colaba (for goods trains only)	•		7:25
	at Agra (for passenger and goods trains)	•		8.89
		Tak	-1	71.00

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Sub-heads (a) to (a). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

# 2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)-

### Details of construction-

The open mileage amounts to 504-35 miles, which may be divided into 389-35 miles of main line and 115 miles of branches. 251-90 miles are double line.

First sanction to the construction of the main line [Bombay (Colaba) to Wadhwan] was accorded in 1856 and the line was opened throughout in 1872.

Permanent-way.—The main line is laid with 69-lb. double-headed and S2-lb. bull-headed steel rails on crossoted pine and oval pot sleepers.

The branches are laid mostly with 69-16. double-headed and 414-lb., 48-lb., 50-lb. and 75-lb. flat-footed steel rails on oval pot and wooden sleepers.

Ballast.-The line is mostly ballasted with broken stone, gravel and shingle.

Fencing .- The line is fenced throughout except the Patri branch.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Patri branch of 2,865 feet radius, and on the Godhra-Baroda Chord of 1,910 feet radius.

Gradient\*.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 and of 1 in 100 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Patri branch and the Godhra-Baroda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter.

### Terms of contracts-

Consequent upon the determination, by purchase of the Company's undertaking, of the then existing contracts the railway is temporarily with effect from the 1st January 1906, being worked under the terms of a provisional contract dated the 27th December 1905, pending the execution of a new contract for a term of years, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.

### Statistics of working-

				,					т	ABLE I.				
		Cı	alend	ar y	onr.			Capital outlay to end of oach year.	Gross earnings.	Net earnings.	Por cont. on capital outlay.	Guaranteed juterest (converted at current rates of exchange up to 1905).	Company's share of net earnings (arrived at under terms of contract).	Gain or loss to the State.
1879 1880	:	:	:	:	:	:	•	Rs. 8,54,16,162 8,47,31,626	Rs. 71,52,788 82,44,876	R <sub>9</sub> . 32,13,354 47,34,654	8·76 5·58	Rs. 43,69,254 43,69,254	Rs. 5,83,816	Rs. 21,55,900 8,03,293
1881 1882 1883 1884 1885	:	:	:	:	:	:	•	8,66,45,448 8,75,89,091 8,89,91,877 9,02,69,608 9,22,58,638	97,45,133 1,01,76,190 1,19,22,209 1,21,95,500 1,31,10,336	56,78,755 50,15,619 67,16,067 68,87,562 74,01,987	6·55 5·78 7·54 7·63 8·02	43,69,251 48,07,781 43,38,189 49,99,341 53,35,189	8,30,798 8,06,346 11,44,829 13,17,768 14,57,541	+4,78,703 -98,461 +12,83,049 +5,70,458 +7,89,257
1886 1887 1888 1889 1890	:	:	:	:	:	:		9,16,82,002 9,32,12,200 9,45,87,848 9,49,45,797 9,53,16,045	1,85,05,635 1,21,64,856 1,27,38,933 1,32,34,371 1,29,40,370	78,73,228 69,98,127 70,48,164 75,41,081 74,23,195	8·50 7·50 7·45 7·94 7·79	55,87,440 57,17,318 60,29,893 61,10,257 54,66,227	16,97,985 12,56,055 12,68,879 14,86,390 14,22,120	+5,87,803 +24,754 -2,50,608 -55,566 +5,34,848
1891 1892 1893 1894 1895	:	•	:	:	:	:		9,55,86,799 9,55,28,735 9,62,67,602 9,77,45,855 9,97,90,965	1,41,37,769 1,42,44,478 1,50,96,045 1,59,48,484 1,75,58,067	82,25,120 81,30,959 95,78,044 1,00,70,974 1,09,87,063	8·60 8·51 9·95 10·80 10·96	58,61,906 65,57,045 66,41,227 76,09,071 77,03,258	18,06,848 17,86,755 \$25,09,587 27,85,713 84,37,619	+5,56,776 2,18,741 +4,24,280 2,73,810 +96,186
1896 1897 1898 1899 1900	:	:	:	•	:	:	•	10,31,57,107 10,63,10,220 10,85,60,144 11,40,73,858 11,60,94,044	1,62,03,933 1,42,61,293 1,58,62,726 1,74,65,045 1,75,98,486	89,00,862 64,70,202 87,42,205 92,90,365 82,28,633	8·60 6·09 8·05 8·15 7 <b>:0</b> 8	73,03,618 69,36,858 67,87,071 67,46,668 68,85,449	20,78,128 9,51,845 19,49,477 21,68,922 15,68,577	-4,80,879 -14,18,196 +5,657 +3,74,775 -1,75,394
1901 1902 1908 1904 1905	:	:	•	:	:	:		11,95,61,022 12,18,78,965 12,37,88,639 12,44,90,478 12,52,43,897	1,59,88,796 1,57,43,536 1,69,63,028 1,78,23,863 1,98,82,065	87,53,789 79,87,622 84,95,201 98,87,912 1,68,90,184	7·82 6·51 6·87 7·54 8·70	70,04,569 71,28,187 72,59,871 78.86,912 73,82,579	18,11,890 12,93,644 15,12,518 18,91,186 26,03,040	
1906	٠		•	•	•	•	·	19,55,08,078	1,99,81,754	1,05,89,688	8:40	72,58,353	7,80,248	+ 25,01,087

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 2 Sub-heads (a) to (e). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—concld.

Statistics of working—concld.

#### TABLE II. Proportion of expenses to Proportion Earnings per mile per week. Earnings per mile Proportion Earnings Calendar Earnings Calendar Calendar Calendar of expenses of expense to per mile per week per mile yoar. year. year. year. ner week per week. earnings. carnings. earnings. carnings Rs. Rs. c Bs. Rs. 70·17 54·97 50·14 290 260 565 59·97 59·23 52·12 1884 . 509 518 564 1896 1897 45-07 1873 1874 43·11 41·12 54.68 44.89 1885 . 1886 . 595 1898 662 49·51 85·33 63·83 54·41 54·71 41·97 41·89 44·11 42·44 1875 1876 508 532 552 1887 1899 296 345 1888 . 1889 . 1900 1901 734 665 52.50 1877 : 278 291 287 1866 42·06 41·23 42·92 71.93 66.56 298 46.61 1890 1902 49.00 1867 1868 1879 758 718 49·48 47·12 73.66 1880 1904 . 74·32 €0·54 1881 . 1893 41.04 630 36.55 1905 1882 1906 . 1871 1883 . 43.10 1895

# 2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)-

### Details of construction-

This railway is 141:14 miles long. Its construction was sanctioned in 1890 and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel, deedar and creested pine sleepers.

Ballast.-The line is ballasted throughout with broken stone and gravel.

Fencing .- There are 761 miles of fencing. The rest of the line is unfenced except in station yards.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200, with short lengths of 1 in 100, and from 1 in 101 to 1 in 150, between \*Godhra and Jekot.

### Terms of contracts-

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway.

### Statistics of working-

Included with the Rajputana-Malwa railway.

# 2 (c) Nagda-Ujjain railway (5' 6" gauge)-

### Details of construction -

This railway is 34-32 miles long. Its construction was sanctioned in 1894, and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.-The line is ballasted with broken stone.

Fencing.-Only station yards are fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients. The ruling gradient is 1 in 200.

### Terms of contracts-

The line is owned by the Gwalior State and worked under the following:-

Agreement of—15th July 1896 (between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway

Company) as to percentage of working charges.

The general conditions are as follows :-

Government aid .- Nil. The line is the property of the Gwalior State.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either Power to determine agreement.— } party expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Sub-heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (c) Nagda-Ujjain railway (5' 6" gauge)-concld.

Terms of contracts-concld.

Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares .- Conform generally with those in force on the Godhra-Rutlam-Nagda railway.

Statistics of working-

											T	BL	c I.				TABI	E II.
				Cı	lend	ar y	er.			•			Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlays	Earnings per mile per week.	Proportion of expenses to earnings.
													Rs.	Rs.	Rs.		Rs.	
1895				•	•	•	•	•	•	•		•	5,33,660		•••			
1896			•										20,71,251	40,701	17,762	0.80	49	
1897		٠			•			•	•			•	22,19,919	1,04,639	47,756	2.15	58	56·36 54·36
1898 1899					•	•	•	•	•	•	•	•	22,31,596	1,29,627	71,509	3.20	73	44.00
1899			•	•	-48	•		•	•	•	•	•	22,31,316	1,47,175	77,732	3.48	83	44·83 47·18
1900	•	•	•	•	•	•	•	•	•	•	•	•	22,29,753	2,51,783	1,20,956	5.42	161	51.96
1901							٠.						22,31,982	1,12,366	67,208	3.01	63	1
1902													22,39,663	1,57,211	85,851	3.83	88	40.19
1903				•							•		22,41,230	1,20,951	62,949	2.81	68	45·89 47·95
1904					•	•	•	•	•		. !	•	22,41,231	1,23,654	66,441	2.96	69	46.27
1905	•	٠	•	•	•	٠	•	•	•	•	•	٠	22,10,441	1,71,435	99,907	4.46	96	41.79
1906									•	•			22,40,441	1,71,491	91,060	4.06	96	46*90

### 2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)-

# Details of construction-

This section of the Petlad-Cambay railway is 21.50 miles long. Its construction was sanctioned in 1888, and it was opened throughout in 1901.

Permanent-way.—The permanent-way consists of 664-lb. flat-footed steel rails on steel sleepers from Anand to Petlad and on crossoted pine sleepers from Petlad to Tarapur.

Ballast,-The line is ballasted with gravel.

Fencing.—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

Curves .- The sharpest curve is of 1,433 feet radius.

Gradients .- The ruling gradient is 1 in 200.

# Terms of contracts—

The line is owned by the Baroda State and worked under the following :-

Agreement of -5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay,
Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway
Company) as to percentage of working charges.

The general conditions are as follows:-

Government aid .- Nil. The line is the property of the Baroda State.

Currency of agreement.— Either party may terminate the agreement at any time on giving one year's Power to determine agreement.—

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Sub-heads (a) to (e). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6'' gauge)—concld. Statistics of working—

									T.	ΛBI	LE I.				7.	TABI	E II.	
											Capital	Gross	Not	Per cont on	GAEKWAR 5	S PETLAD,	PETLAD (ANAND-1 SECTION	
	CALENDAR YEAR. end of each year. earnings.													capital outluy.	Earnings per mile per week.	Proportion of expenses to carnings.	Eurnings per milo per week.	Proportion of expenses to carnings.
889			•	**									Rs.	•	Rs.		Rs.	
889 1890	:	:	:	:	:	:	:	:	:		4,71,822 6,17,922	72,619	20,870	 <sub>3·22</sub>	 71	36·08		
891 892 893 894 895	:	:	:	:	:	:	:	:	:		7,10,118 7,11,051 7,12,768 7,23,482 7,23,139	59,113 61,213 62,953 69,668 73,891	36,346 31,757 40,027 41,037 46,581	5-12 4-89 5-70 6-09 6-44	85 88 92 100 106	38·51 43·25 36·47 36·79 36·96		
896 897 898 899 900	:	:	:	:	:	:	•	:	:	•	7,23,616 7,55,7 7,49,037 7,52,439 7,52,097	1,17,540 64,737 51,121 70,668 88,481	82,847 33,946 28,156 30,312 41,718	11:45 4:49 8 76 5:22 5:55	169 93 <b>71</b> 102 127	29·52 47·56 44·92 41·97 52·86		
901 902 903 904	:	:	:	:	:	:	:	:	:	:	11,86,381 11,85,900 11,48,092 11,46,552 11,31,273	93,283 1,05,951 98,451 1,20,974 1,10,463	51,769 56,818 50,989 64,876 81,966	4:36 4 79 4:38 5:60 7:25	::. :::	::: ::: :::	101 95 88 108 126	44:47 46:37 48:92 46:37 41:65
906											د11,30.87ء	1,39,209	73,634	6.21			124	47-11

# 2 (e) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)-

### Details of construction-

This section of the Petlad-Cambay railway is 12:30 miles long. It was sanctioned in 1899 and was opened to Cambay in 1901.

Permanent-way. - The permanent-way consists of 661-lb. flat-footed steel rails on crossoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—Only station yards are fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a short bit of 1 in 200 between Sayama and Cambay.

### Terms of contract-

The line is owned by the Cambay State and worked under-

Agreement of -17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows :-

Government aid .- Nil. The line is the property of the Cambay State.

Currency of agreement.—

The agreement may be terminated at any time on one year's notice from either Power to determine agreement.—

The agreement may be terminated at any time on one year's notice from either party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a Minor Work, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2 and 2 6 gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay State, and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway. Statistics of working—

*********										Т	ABLI	e I.			·		TABI	E II.
-				c	alond	lar ye	ar.						Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses
													Rs.	Rs.	Re.		Rs.	
1901 1903 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	:	7,49,676 7,49,676 7,49,676 7,68,728 8,06,482 8,11,255	12,011 25,497 25,151 82,199 83,638 84,531	5,950 18,622 12,803 17,276 19,603	0·79 1·81 1·71 2·25 2·43	40 45 44 87 59	50 46 46 57 49 10 46 35 41 78 47-11

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 2 Sub-heads (a) to (o)

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM -contd.

### 2 (f) Tapti Valley railway (5' 6" gauge)-

#### Details of construction-

This railway connects Kankra Khari, a station on the main line of the Bombay, Baroda and Central India railway, with Amalner. It is 155.48 miles long. It was opened in 1900.

Permanent-way.—The permanent-way consists of 70-lb. flat-footed steel rails on wooden sleepers.

Ballast .- The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves. - The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

### Terms of contracts-

The line is owned by the Tapti Valley Railway Company and worked under the following contracts:-

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway
Company) for maintenance and workin

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:-

Government aid.—A relate is allowed up to 10 per cent. of the gross extraings of the Bombay, Baroda and Central India and Rajputana-Malwa radways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus a sum of Rs. 6.000 per annum towards the Company's office expenses and expenses of management. Land in British territory was provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupers a sum equal to 25 times the average yearly net carnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract .- Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2' and 2' 6" gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross carnings for the year. The residue of the gross carnings is payable to the Tapti Valley Railway Company.

Rates and force.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

# Statistics of working-

				TABLE I.				TAT	ste II.	
Calen- dar year.	Capital outlay to end of each year.	Grons carnings.	Net earnings.	Percentage on capital outlay.	Rebate from B.,B. & C. I. Ry.	Total income.	Per cent. of total income or. capital outlay.	Earnings por fule por week.	Proportion of expenses to earnings.	i .
	Rs.	Rs.	Rs.		Rs.	Rs.	1	Rs.		
1896 1897 1898 1890 1 <b>9</b> 00	8,300 20,96,294 60,45,418 1,21,09,133 1,28,31,291	 2,636 2,42,593 6,68,475	  					 18 71 84	48 70 47 40 44 00	The not earnings for 1898, 1890 and ist-half of 1900 were credited to interest on capital, and those for 2nd- half of 1900 (including re- bato) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of
1901 1902 7903 1904 1905	1,29,18,780 1,29,70,581 1,30,02,400 1,30,77,018 1,80,88,629	6,00,553 8,26,485 8,62,758 6,58,740 10,11,222	3,42,243 4,64,242 4,83,142 3,68,894 5,86,921	2·65 3·57 8·72 2·82 4·49	33,226 45,196 40,258 28,441 2,928	3,75,469 5,08,438 5,23,400 3,97,885 5,89,849	2 90 8 92 4 03 3 04 4 51	74 102 107 81 125	43 01 43 95 44 00 44 00 41 95	Excluding interest, Rs. 4,488, on the capital cost of works at Amuler junction, the percentage of income on capital outlay in 1908 was 4.00.
1908	1,80,82,853	11,84,712	6,35,460	4.86		6,35,460	4.86	140	44-00	

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$ . BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

### 2 (g) Ahmedabad-Dholka railway (3' 3%" gauge)-

### Details of construction-

This railway connects Sabarmati, a station on the Rajputana-Malwa railway, with Dholka. It is 33:50 miles long. Its construction was sauctioned in 1901 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on decdar sleepers.

Ballast .- Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and lovel crossings.

Fencing .- Only station yards are forced.

Curres .- The sharpest curve is of 1,146 feet radius.

Gradients .- The ruling gradient is 1 in 150.

# Terms of contracts-

The railway is worked under the following contracts :-

Contracts of -25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows:-

Government aid.—A relate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedahad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent, per annum on the actual capital expenditure plus Bs. 5,000 per annum towards the Campany's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly not earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts .- Nil.

Terms of working.—The tailway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1.000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, preportionate to its total carnings, but not exceeding 14 per cent. of its gross earnings for the year. The not earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares. -To be acrouged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking

### Statistics of working-

								"	'авъе I.					TAI	trif.
	(	Jalon	dir s	ear.			Capital outly to end of each year.	(trops eardings,	Net earnings.	Per cent. on capital ontlay.	bay, Baroda and Central India railway,	Total income.	income on	Earnings per mile per week.	Pro : of exp : to carnings,
1903 1904 1905 1906	:	:	:	:	:	:	Rs. 10,13,420 10,17,308 10,44,935 10,83,722	R3. 64,261 99 044 98 214 1,09,743	Ra. 35,986 55,165 57,203 56,418	3:55 5:15 5:17 5:21	Rs.  	Rs 35,986 53,165 57,203 56,418	3:55 5:45 5:47 5:21	Rs. 45 57 56 58	44.00 44.00 41.76 44.00

# 2 (1) Ahmedabad-Parantij railway (3' 33" gauge)-

### Details of construction-

This railway connects Ahmedadad, a station on the Bombay, Baroda and Central India railway, with Idar Road. It is 54:70 miles long. Its construction was sanctioned in 1896 and it was opened in 1897.

Permanent-way.—The permaneut-way consists of 411-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted with kunkur, sand and stone.

Fencing .- Only station yards are fenced.

Curves .- The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main hoad 2 Sub-heads (a) to (b). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (h) Ahmedabad-Parantij railway (3' 3\structure 3' gauge)—cozcld.

#### Terms of contracts-

The Ahmedabad-Parantij railway is worked under the following contracts:-

Contracts of -13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:-

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly not earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent, the total capital expenditure of the Company, nor being less than such expital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts .- Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 41 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

Statistics of working—

									TAR	ж I.					TAB	tir II.
-		Cal	enda:	r yos	ır.			Capital outlay to end of each year	ево 16) "вупін <b>т</b> во	Not carolugs.	Percentage on capital outlay.	Robato from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital out- lay.	Earnings per mile per week.	Pro: of exp: to carn- ings.
1000								Rs. 13,12,752	Rr.	Es.		Ra.	Rs.		Rs.	
1896 1897	:	:	:	Ċ	:	:	:	19,42,211	69,069	36,665	1 89		36,665	1.89	46	# 46-93
1898 1899	٠	•	•	•	•	•	٠	19,42,971 19,49,616	1,19,790 2,10,034	8.,836 1,21,687	4·12 6·21		85,436 1,21,687	4·12 0·24	33° 74	42·70 42·23
1900	:	:	:	÷	:	·	•	19,55,305	2,65,105	1,55,952	7 93		1,55,952		93	41.17
1901								19,49,355	1,77,438	99,365	5.10		99,365		62	14:00
1902	:							19,70.012	1,79,794	1,00,685	\$11 445		1,00,685		63	40.04
1903	•	•	•	•	•	٠	•	10.50.045	1.50,112 1.86,227	81 063 1,04,287	5 24		84,063 1,04,287		59 65	44·00 44·00
1904 1905	:	:	:	:	:	:	:	10 01 75 /	1,98,713	1.15.469	5.80	1	1,15,469		70	41.89
1006		۸.						19,98,023	2,20,9.11	1,33 727	6.19		1.23,727	6.19	78	44.00

### 2 (i) Gaekwar's Mehsana railway (3' 3 " gauge)-

### Details of construction-

The total length of this railway is 92.63 miles. It consists of three branches, Mehsana to Kheralu, 27.73 miles, Mehsana to Virangam, 40.21 miles, and Mehsana to Patan, 24.69 miles. The first branch was opened throughout in 1885 and the other two in 1891.

Besides the above 45.84 miles are under construction.

Permanent-way.—The Kheralu and Viramgam branches are laid with 41\frac{1}{2}-lb. flat-footed steel rails on transverse steel and deodar sleepers. The Meh-ana-Paran section is laid with 40-lb. iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 41\frac{1}{2}-lb. steel rails.

Ballast .- The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing.—The whole line, except 411 miles which are fenced by wire, was originally fonced with cactus; but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

### Terms of contracts-

The railway is the property of the Baroda State and is worked under the following:-

Agreement of lat July 1891 (between the Government of His Highness the Gackwar of Baroda and the Bombay,

Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Bull-heads (a) to (e). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (i) Gaekwar's Mehsana railway (3' 3% gauge)—concld. •

Statistics of working-

												т	ABL	κI	•		•		T'A1	BLE II.
				•	c	alon	dar y	ear.				0			Capital outlay to end of each year.	Gross earnings.	Not earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp to earnings.
1887 1888 1889 1890	:		:	:	:	:	:	:			•		:	:	Rs. 13,55,493 9,16,565 11,18,446 25,44,310	Rs. 27,890 47,502 55,290 59,214	Вя. 5,564 16,672 20,348 23,308	0:41 1:82 1:82 0:92	Rs. 33 43 37 41	80.05 64.90 61.82 60.66
1891 1892 1893 1894 1895	:		· ·	:	:	:	:	:			•	• • •	:	•	29,04,050 29,71,610 30,26,752 30,94,578 32,55,044	1,94,247 2,58,963 3,36,859 3,79,972 3,38,444	1,05,801 1,53,005 1,98,250 2,36,387 2,02,440	3·64 5·15 6·55 7·64 6·22	49 54 70 79 70	45·53 40·92 41·12 37·79 40·18
1896 1897 1898 1899 1900	:	•	• • •	:	:	•	, : :	:			•	•	: ·	' : : :	32,61,448 32,63,900 82,82,612 32,83,612 33,61,950	4,23,283 3,39,125 3,46,491 3,76,160 4,28,545	2,71,262 1,18,358 1,99,052 2,16,654 2,38,754	8·92 3·68 6 07 6·60 7·17	88 70 72 79 89	35·91 46·58 42·55 42·40 44·75
1901 1902 1903 1 <b>904</b> 90 <b>5</b>	:	•	•	:	:	:	:	:	:	:			:		33,48,911 23,61,329 38,78 132 33,95,678 34,36,885	3,92,227 3,74,515 3,47,083 3,82,249 4,52,184	2,15,111 1,96,977 1,77,466 2,04,906 2,62,901	6:42 5:52 5:25 6:06 7:65	81 78 72 79 94	45·16 46·87 48·87 46·39 41·86
906		•							•						42,78,358	4,20,777	2,21,124	5:24	87	46.74

# 2 (j) Jaipur (Siwai Madhopur) railway (3' 33" gauge)—

### Details of construction -

From Jaipur the Rajputana-Malwa railway is utilized as far as Sanganer, from which station this railway actually starts. The open mileage (Sanganer to Nawai) is \$2.18 miles. It was sanctioned in 1897 and was opened in 1905.

There are 40.65 miles still under construction.

Permanent-way.—The permanent-way consists of 414-lb. flat to to 1 steel rails laid on deodar sleepers.

Ballast.-The line is ballasted with stone.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main road.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The limiting gradient is 1 in 250 in the down direction and 1 in 200 in the up direction.

### Terms of contract-

The railway is owned by the Jaipur State and worked by the Bombay, Barola and Central India Railway Company under terms which are at present under consideration.

### Statistics of working-

											TABLE I.				Таві	n II.
				Calen	dar :	yoar.					Capital outlay to end of each year.	Gross carnings,	Net earnings.	Per cent, on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1905 1906	:	:	:	:	:	:	:	• *	:	:	Rs. 18.24,728 21,14,507	Rs. 12 299 68,943	R*. 6.779 36,617	0:37 : <b>1.7</b> 8	Rs. 52 <b>4</b> 1	<b>44:88</b> 46 89

# 2 (k) Palanpur-Deesa railway (3' 3%" gauge) -

### Details of construction-

This railway is 17:28 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 40-lb, flat-footed iron rails, except in station yards and the first 3 miles of line which are laid with 41½-lb, steel rails. The rails are laid on Denham-Olpherts plate, east iron pot, and steel dish cover sleepers.

Ballast .- The line is ballasted with stone and sand.

Fencing .- The line is fouced throughout.

Curves,-The sharpest curve is of 1,910 feet radius.

Gradients .- The ruling gradient is 1 in 150,

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 2 Sub-heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA BAILWAY SYSTEM—contd.

# 2 (k) Palanpur-Dessa railway (3' 3 %" gauge)—concld. • Terms of contracts—

The railway, is worked under-

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Scoretary of State, and letter No. 62 Ry., dated the 23rd June 1892, from the Secretary of State to the Government of India.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :-

Government aid .- The line is owned jointly by Government and the Palanpur Durbar.

Currency of contract.—The contract is contract with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract .- Nil

Terms of working.—The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the expansion expensions in providing a 5' 6" gauge sub-structure.

Rates and fures .- Same as on the Rajputana-Malwa railway.

Statistics of working-

											TABLE I.						
	c	alen	lar y	ear.			Слрі	TAL.		NET EA	RNINGS.	PER CENT	ON CAPI-	Interest	<u> </u>	TAB	LE II.
	,						Contributed by the Palanpur Durbar.	ed by	Gross carnings.	Attribut- able to the Durbar.		On capital contribused by the Durbar	On capital contribut- ed by Gov- ernment.	Govern- ment capital.	Gain or loss to the Govern- ment.	Earnings per mile per week.	exp: to
1892 1898 1894 1895 1896	:	:	:	:	:	:	Re. 20,000 1,85,000 1,85,000 1,85,000 1,85,000	R4. 16,746 1,78,953 2,14,601 2,15,374 2,32,746	Rs. 4,436 37,544 38,182 51,629	Rs. 1,335 11,365 11,333 14,101	Rs.  1,110 11,791 11,512 15,072	0·72 6·14 6·13 7·62	0-63 5-19 5-35 6-47	Rs. 1,081 5,371 8,783 8,878 9,149	Rs -1,031 -4,261 +2,998 +8,134 +5,923	Rs. 38 42 42 57	44.87 88.85 40.17 48.50
1898 1898 1899 1900	:	:	:	:	: :	:	1,85,000 1,85,000 1,85,000 1,85,000	2,33,264 2,33,264 2,33,264 2,33,261	43,264 38,199 44,628 47,669	10,883 10,334 12,102 14,238	17,243 11,628 13,618 12,616	5:88 5:50 6:54 7:70	5°25 4°99 5°84 5°41	9,305 9,331 9,330 9,330	+ 2,938 + 2,297 + 4,288 + 3,286	48 43 50 58	46-85 42-50 42-87 43-66
1901 1902 1908 1904 1905	:	:	:	:	:	:	1,85,000 1,85,000 1,85,000 1,85,000 1,85,000	2,33,264 2,36,786 2,87,069 2,37,069 2,37,069	36,805 83,690 29,734 29,185 35,178	7.423	10,548 8,380 7,898 8,340 10,948	5:07 4:50 4:01 8:94 5:12	4·52 3·52 3·33 3·62 4·58	9,330 9,408 9,132 9,474 9,472	+1,218 -1,078 -1,534 -1,134 +1,376	41 37 33 32 39	45-87 47-01 48-47 46-49 42-24
1906						·	1,85,000	2,39,155	40,154	9,962	11,376	5 33	4.76	9,531	+1,845	45	47:11

### 2 (1) Rajputana-Malwa railway (3' 33" gauge)-

The Maharaja Holkar lent the British Government one hundred lakhs of rupses at 4½ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

The Maharaja Scindia of Gwalior lent the British Government seventy-five lakes of rupees at 1 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

### Details of construction-

The open mileage of the Rajputana-Malwa railway is 1,774-36 miles. It is made up of the following sections:—
(1) Rajputana section, main line (Delhi to Ahmedabad), 539-15 miles; Rewari-Bandikui-Phulera loop, 178-89 miles; and branches, 139-28 miles; (2) Malwa section, main line (Khandwa to Ajmer), 393-19 miles; branch, 14-28 miles; (3) Cawapore-Achnera section, main line (Cawapore to Achnera), 239-47 miles; branches, 12-33 miles; (4) Rewari-Fasika section, 262-77 miles.

The Rajputane section was sanctioned in 1870 and was opened in 1881; the Malwa section was sanctioned in 1872, opened in 1881; the Cawnpore-Achnera section was sanctioned in 1874, opened in 1884; and the Rewari-Fazilka section was sanctioned in 1861, opened in 1885. 2.92 miles of the line are double track.

Permanent-way.—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb. iron, 411-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 411-lb. steel rails on deodar sleepers. The Rewari-Fazilka section has 411-lb. steel rails on deodar sleepers.

# History of railways constructed and in progress.

[For Index see page 112 ]

Number Main head 2 Sub-hands (a) to (o) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (1) Rajputana-Malwa railway (3' 33" gauge)-contd. Details of construction-concld.

Ballast.—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

Fencing.—The total length of line fenced on the Rajputana section is 669 miles. The Malwa section is fonced for 934 miles and at stations. The Cawnpore-Achnera section is fenced on both sides for 1451 miles on the main line, except for 71 miles which are fenced on one side only. The Soron branch is fenced for 31 miles and the Brindaban branch for 31 miles. The Rewari-Bhatinda-Fazilka section is fenced for about 1134 miles and at stations. On the Rewari-Phulera section only the Narnaul station yard is fenced.

Curves.—The sharpest curve is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 150, except on the Malwa section between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani where it is 1 in 40. Terms of contracts-

The Rajputana-Malwa and Godhra-Rutlam-Nigdi railways are worked together as one undertaking under the following contracts:-

Contracts of -24th September 1884.-The original contract (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

> 16th March 1888.-Contract supplemental to that of 1884 for maintaining and working the Cawnpere-Ashnera railway as a part of the Rajputana-Malwa railway.
>
> Sth November 1889.—Contract supplemental to those of 1884 and 1885 for maintaining and working

> the Brindaban branch as a part of the Cawnpore-Achnera railway.

5th October 1893.—Supplemental to the riginal contract for maintaining and working the Godhra-Rutham railway as a part of the Rajputana-Malwa railway.

1st October 1897. - Supplemental to those of 1854 and 1893 for maintaining and working the Rutlam-Nagda radway as a part of the Godhra-Rotlam railway.

1st February 1901 - Supplemental to those foliable and 1888 modifying the terms as to the division of working expanses.

The general conditions of the contracts are as follows:-

Government aid .- The line is the property of Government.

Currency of contracts.—The contracts were current up to the 31st December 1905, and shall continue in force as from that date until determined in pursuance of the provisions of the provisional contract, dated the 27th December 1905, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.

Power of company to surrender contracts .- Nil.

Terms of working.—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a miximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of R-, 10 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2' and 2' 6" gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3' 3\frac{3}{3}" gauge, and Godhra-Rutlan-Nagda, 5' 6" gauge, railways, are paid in full to Government.

Rates and fures, -- Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates.

Statistics of working-

TARLE I Goodedoo : On College Buthers Namber alway)

			Cale	ndar	year.					Capital outlay to end of each year.	Gross earmogs.	Net ournings.	Per cent. on capital outlay.	Interest.	Company's share of net carnings.	Gain or loss to the State
1879 1880 1881 1882 1883	:	:	:	:	:	:	:	:		Rs. 7,06,47,354 8,38,87,014 9,30,43,645 9,94,83,933 11,08,57,933	Rs. 38,61,997 59,12,511 91,70,110 1,11,82,614 1,35,61,166	R 8. 15,41,963 17,33,714 55,96,044 52,84,668 63,39,208	2:18 2:07 3:56 5:31 5:72	Rs. 28,43,439 35,81,449 37,48,505 38,74,919 40,74,808	Rs.  	Re. -13,01,536 -18,47,785 -1,52,461 +14,09,749 +22,64,400
1884 1685 1666 1887 1888	:	:	:	:	:	:	:	:		11,92,08,595 12,22,63,117 12,86,59,407 12,87,69,487 12,96,59,656	1,48,20,446 1,73,00,501 1,82,93,640 1,65,28,203 1,85,14,714	61,92,677 79,71,964 89,55,549 81,21,547 96,31,727	5·19 6·52 6·99 6·31 7·48	43,90,548 49,10,379 51,72,731 51,86,578 52,27,345	 6,28,054 5,06,190 4,99,909	+ 18,02,129 + 30,61,585 + 81,54,764 + 24,31,779 + 89,04,474
1889 1890 1891 1893 1893	:	:	:	:	:	:	:	:	:	13,02,53,556 18,00,01,510 13,17,20,440 14,34,21,072 14,30,06,325	1,99,70,005 1,74,28,281 2,17,59,570 2,24,60,434 2,26,83,265	1,07,97,217 86,42,525 1,23,17,065 1,32,14,774 1,33,25,640	8·29 6·65 9·35 9·21 9·33	*52,48,893 52,61,238 53,13,844 56,14,176 57,00,808	8,56,110 6,57,951 9,78,835 13,45,763 13,24,918	+ 46,92,214 + 27,23,236 + 61,24,386 + 62,54,835 + 62,99,914
1894 1895 1896 1897 1898	:	:	:	:	:	:	:	:	:	14,72,89,589 15,55,56,871 15,03,08,348 14,94,51,054 15,03,74,780	2,51,44,200 2,45,42,974 2,10,21,002 1,81,74,358 2,23,17,315	1,54,75,342 1,44,02,355 1,13,79,807 1,00,97,008 1,19,05,991	10·51 9·26 7·57 6·76 7·91	58,77,844 59,78,006 60,63,242 60,48,581 60,77,309	15,63,148 16,21,635 9,93,351 5,09,720 9,58,967	+ 80,34,35 + 68,02,11 + 43,23,21 + 85,88,70 + 48,74,71
1899 1900 1901 190 1968	:	:	:	:	:	:	:	:		15,14,26,773 15,81,25,211 15,43,58,624 15,64,85,445 15,78,84,717	2,60,91,341 2,91,75,054 2,78,62,296 2,58,96,694 2,27,25,664	1,47,30,148 1,60,55,050 1,48,89,645 1,86,25,409 1,12,42,360	9·73 10·48 9·65 8·71 7·18	60,92,658 61,35,151 61,89,498 62,80,315 62,84,957	9,02,364 21,67,610 19,765  5,644	+ 76,45,124 + 77,52,284 + 76,86,863 + 73,45,094 + 50,51,764
1904 1905 1906	:	:	:	:	:	:	:	:	:	16,17,31,683 16,28,49,528 16,65,57,367	2,83,65,289 2,84,44,243 2,80,04,905	1,21,57,833 1,62,29,896 1,47,48,580	7·152 9·97 8·85	64,55,047 64,41,437 65,99,940		+ 57,02,78 + 97,88,450 + 81,48,59

History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (a)}}$  · BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2(1) Rajputana-Malwa railway (3' 33" gauge) -concld.

Statistics of working-conold.

TABLE IL

	M	outana- alwa; '3;".	Holka Sin Neor 8'		Rain	stern itaua, 33".	Rewari- po 3'	Feroze- re, 9.1".	Muttra-l 3'	Iathrae, 3g".		pore- labad, 3¦".	Muttra-	Achnera, 8¦".	Ach	pore- nora, 3%.	R:	odhra- otlam- agda,
Calen- dar year.	Earn- ings per mile per week.	Pro: of exp: to oarnings.	Earn- ings per milo per week.	Pro: of exp. to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to enrn- ings.	Earn- ings per mile per week.		Earn- ings per onle per week.	Pro : of exp : to earn-	Earn- inga per mile per week.			earn- ings.	Earn- ings per mile per week.		Earn- ings per mile per week.	Pro : of exp : to oarn- ings.
1873 . 1874 . 1875 . 1876 .	Rs. 32 69 98 114 130	96-59 80-37 64-04 65-40 67-99	Rs 60 123 99 86	81-02 91-71 92-87 76-86	R4.		Rs		Rs.  108 55 68	58:18 57:74 54:86	Rs.		Rs		Rs		Rs.	
1878 . 1879 . 1880 . 1881 . 1882 .	136 153 152 189 188	61:97 66:74 66:88 60:41 53:07	122 128 118 132	67:50 74:53 74:71 69:11	 86 151 	86 08 85 79 	  	  	65 83 89 90 81	53 33 54:97 57:35 69:19 76:97	 18 65 8	233·15 69 76 67·36	      	89:01 86:12			•::	
1883 . 1884 . 1885 . 1886 .	219 223 224 212 191	52·18 56·92 52·81 50·27 50·84		   		   	75 96 	81·28 67·28 		  	uded wit   	h Cawnı	ore-Ach	nera.	50 81 70 	63:96 69:17 87:47 		
1888 . 1889 . 1890 . 1891 .	215 230 200 251 257	48-26 45-82 50-41 43-47 41-01		::- :- ::-								: : :		 				
1893 . 1894 . 1895 . 1896 . 1897 .	259 285 269 227 212	11·12 38·19 16·29 44·35 46·60					  	  				i			·		50 106 184 169 146	41.61 40.64 57.01 69.27 72.02
1898 . 1899 . 1900 . 1901 . 1902 .	241 295 317 313 291	42.83 42.06 43.18 46.29 47.54		  	::: ::: :::		 <b>~:</b> 	  		••• •• ••	:: :: ::			 			181 172 219 156 140	51·14 58·84 46·84 45·15 46·27
1903 . 1904 . 1905 .	253 260 206	49·16 47·68 12·95	 :::			::- ::-				:	 :::	::: :::		 			147 158 224	48·29 47·62 42·78
1906 .	287	47:37										·					217	47 04

2(m) Vijapur-Kalol-Kadi railway (3' 3\frac{3}{3}" gauge)-

Details of construction—
This railway is 41.37 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—16 miles are laid with 414-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.

Ballast.-The line is ballasted with broken stone and shingle.

Fencing.—Only station yards and 11:07 miles of the Vijapur-Kalol section are fenced.

Curves.—The sharpest curve is of 3,820 feet radius. Gradients.—The ruling gradient is 1 in 150.

Terms of contracts-

The railway is the property of the Baroda State and is worked under the following:

Agreement of—23rd November 1903 (between the Government of His Highness the Gackwar of Baroda and Bonbay, Baroda and Central India Railway Company) for working.

Contract of-1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working-

												Tage	E I.		TABI	ie II.
				Caler	dar	year.					Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cont. on capital outlay.	Earnings per mile per week.	Pro: of exp to carnings.
390 300	•		:	:	:	٠.		:		:	Re. 7,534 20,885	Rs.	B.s.	•••	Rs	
901 902 908 904 905	:	*::::::::::::::::::::::::::::::::::::::	:	:	:	:	:	:	:	:	6,60,716 10.47,188 11,84,246 13,35,402 13,19,586	19,514 56,916 74,572 87,181	 9,226 28,782 40,043 50,496	1·18 2·43 3·00 3·83	 28 81 35 <b>4</b> 0	52·72 40·43 46·25 42·05
06			•	•		•					18,24,925	95,660	50,648	3.83	44	47.05

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—confd.

2(n) Gaekwar's Dabhoi railway (2' 6" gauge)-

### Details of construction-

The total length of the railway is 94.48 miles. It consists of three sections, Miyagam to Chandod, 30.62 miles; Dabhoi to Bodeli, 22.41 miles; and Dabhoi to Masor\* Road, 41.45 miles. The construction of those sections was first sanctioned in 1672, 1877 and 1879, respectively, and they were opened throughout in 1879, 1890 and 1904, respectively.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there are still about 5 miles of 28-lb. iron rails in the road.

Ballast.-The line is chiefly ballasted with sand.

Fencing.—The line is practically unfenced except in station yards.

Curves .- The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

### Terms of contracts-

The line is owned by the Baroda State and worked under-

Agreement of —1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:-

Government aid .- Nil. The line is the property of the Baroda State.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, plus 121 per cent. of total working expenses (but not less than Rs 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

### Statistics of working-

				TABLE	: T.		,	TABLE II.		
Calenda	t yoai	•	Capital outlay to ond of each	Gross carnings.	Net earnings.	Per cent. on capital outlay.	Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Remares.
879 . 880 . 881 . 882 .	:		Rs. 9,62,450 11,65,540 12,57,448 12,73,942 12,73,630	Rs. 72,080 1,28,825 1,11,233 1,14,022 1,46,070	Rs. 31,608 65,134 18,849 46,717 38,585	3 28 5:59 3:88 3:66 3:05	1873 1874 1875 1876 1877	Rs. 21 32 83 88 45	98:34 75:78 78:11 75:35 78:20	
864 . 685 . 886 . 887 . 888 .	:		12,80,177 13,11,229 13,58,502 13,16,259 13,74,295	1,49,091 1,52,283 1,53,699 1,50,052 1,45,757	48,540 55,623 89,394 47,339 43,854	3:80 4:24 2:90 3:52 3:19	1878 1879 1880 1881 1882 1883 1884 1685	43 46 51 46 47 48 49 50	62-42 56-15 49-14 65-41 67-54 73-75 67-43 68-47	;
689 . 890 . 891 . 892 . 893 .	•		16,10,398 17,53,877 17,94,157 18,47,403 18,55,158	1,42,989 1,95,028 2,01,165 8,38,609 2,52,106	49,398 74,570 68,126 1,06,510 1,32,507	3·07 4·25 3·60 5·77 7·14	1886 1867 1888 1889 1890 1891 1892	50 51 48 47 57 54 64	74:37 60:73 69:91 65:45 61:76 66:13 55:36	
894 . 895 . 896 . 897 .			18,88,774 19,08,757 20,74,756 21,08,574 21,18,491	2,10,316 2,34,473 2,58,788 2,20,901 2,10,240	95,429 96,764 1,25,657 50,949 - 26,592	5·05 5·02 6·06 2·42 	1893 1894 1895 1896 1897	68 65 63 69 56	47:44 60:29 58:73 51:44 76:94	
899 . 800 . 801 . 802 . 903 .			21,17,586 21,17,528 21,14,302 22,34,829 23,60,528	2,45,974 2,35,281 2,53,936 2,22,573 2,60,550	87,571 61,603 73,427 76,867 7,467	4·14 2·44 3·47 3·62 0·32	1898 1899 1900 1901 1902	51 60 57 62 54	112:65 64:40 73:82 71:08 65:69	
904. 905.	:	:	24,64,682 24,73,909 84,75,587	2,98,906 3,72,467 3,94,817	1,26,426 2,04,004 1,78,665	5·18 8·25 7·22	1908 1904 1905 1906	60 65 76 80	97·18 57·70 45·23 54·75	The decrease in net earnin in 1903 was due principal to the cost of 3 engines he ing been charged to Revent

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 Bub-heads (a) to (o). BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—concld.

# 2 (0) Rajpipla railway (2' 6" gauge)-

#### Details of construction-

This line, which connects Anklesvar with Nandod, is 37.37 miles long. Its construction was sanctioned in 1894 and it was opened in 1899.

Permanent-way .- The line is laid with 1121b. flat-footed steel rails on half-round jungle teak sleepers.

Ballast .- The line is chiefly ballasted with coarse river sand.

Pencing .- Only the station yards and small lengths at miles 1 and 9 are fenced.

Curves.—The sharpest curve is of 1,132 feet radius.

Gradients.—The ruling gradient is 1 in 150.

### Terms of contracts-

The line is owned by the Rajpipla State and is worked under-

Agreement of-19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:-

. Government aid .- Nil. The line is the property of the Rajpipla State.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calcular half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net carnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

#### Statistics of working-

										TABLE 1.			TART	E II.
			Cales	utan	year.	•			Capital outlay to end of each year.	Gross carnings.	Not carmings.	Por cent. on capital outlay.	Earmaga per mile per week.	Pro: of oxp:
1894 1895	:	:	:	•	•	:	:		Re. 12,674 77,265	Rs. 	R4. 		Rs. 	:::
1896 1897 1898 1899 1900	:	:	:	:	•:	:	:	:	4,09,141 7,55,792 11,03,333 18,07,820 18,40,159	5,705 10,624 85,800 49,463	- 6,574 -9,172 8,478 12,139	  0.65 0.93	 11 22 25	214-53 186-5 <b>3</b> 76-32 75-46
1901 1902 1903 1904 1905	:		:	:	:	:	:	:	19,06,829 13,05,415 13,04,281 13,04,522 13,04,522	47,182 38,726 44,870 49,207 62,017	10,487 10;131 10,674 16,890 28,194	0 80 0'78 0'82 1'29 2'16	24 20 28 25 32	77-77 73:84 76:19 65:68 54:54
1906		•				•		•	. 13,04,867	67,137	32,526	2:49	35	51 55

 $\mathbf{Number} \text{-} \underset{\mathbf{Suli-heads} \ (a)}{\mathbf{Main}} \text{ head 3} \\ \mathbf{EASTERN} \ \ \mathbf{BENGAL} \ \ (\mathbf{STATE}) \ \ \mathbf{RAILWAY} \ \ \mathbf{SYSTEM--}$ 

Lines comprising the system.—The Eastern Bengal (State) railway system is made up of—

•	Open line.	or sanctioned for construction.	Total.
• • • • • • • • • • • • • • • • • • •	Miles.	Miles.	Miles.
(a) Eastern Bengal (State) railway, Fastern, Southern and Central sections (5' 6" gauge)	. 497.95	8:39	500:34
Eastern Bengal (State) railway, Northern, Pehar, Dacca and Kaunus-Dhubri soctions and Ganhati extension (3° 3%" gauge that he shaha and and Toosta Kungray	) 71631	228-27	946.58
branches and British section of the Santral art Extension 2' 6" gauge)	55.03 53.23	•••	55·03 53 22
(c) Mymensiugh-Jamalpur-Jagan nathganj railway (3' 3," gauge) (d) Cooch Behar railway (2' 6' gauge)	33.60	•••	33.60
Total	. 1,358-11	236.66	1,594.77

### Running powers-

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)—

The open mileage of the standard gauge portion of this system amounts to 497.95 miles, which may be divided into (1) Eastern section, main line, 145.07 miles, branches, 154.37 miles; (2) Southern section, main line, 29.20 miles, branches, 41.62 miles; (3) Contral section, main line, 14.4.51 miles, branches, 23.16 miles. Of those 112.21 miles are double line. Besides the above there were under construction 3.39 miles of single, and 5.00 miles of double line; and 2.99 miles of double line are being quadrupled.

History of railways constructed and in progress. [For Index sec [rage 112.]

Number Main head 3 EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)-concld. Details of construction-concld.

Sanction was first given to the construction of the above mentioned sections of the Eastern Bengal (State) railway in 1859, 1862 and 1881, respectively, and they were opened throughout in 1871, 1863 and 1884.

Permanent-way. - The permanent-way on the double line portion of the Eastern section consists of 73-lb. and 75-lb. double headed steel rails, with Denhain-Olpherts' east iron sleepers, except on the length between Calcutta and Naihati which is laid with 85-lb bull-headed steel rails, with sal and jurrah sleepers at the joints. The single line portion of the Eastern section is also laid chiefly with 73-lb, and 75-lb, double headed steel rails, the greater part on Denham and Olpherts' cast iron sleepers and the remainder on east iron bowl and sal wood sleepers. The Murshidabad branch is laid with 75-lb. new pattern flat-footed steel rails on sal sleepers.

The double line portion of the Southern section and the Budge Badge branch are laid with 73-lb. double-headed steel rails on Donham and Olpherts' cast iron sleepers. The single line portion of the Southern section consists of 72-lb. and 73-lb. double-headed iron and steel rails mostly on Denham and Olpherts' cast iron sleepers. The Diamond Harbour branch is laid with 64-lb. and 73-lb. double-headed steel rails mostly on Denham and Olpherts' cast iron sleepers.

The Central section is laid with flat-footed steel rails 62 lbs. to the yard on sal sleepers.

Ballast.—The main line is ballasted generally with brick ballast. Where 85-lb bull-headed rails have been laid, brick

ballast has been replaced by stone.

Fencing.—The whole of the Eastern section is fenced, except between Panchooria Junction and Goalundo, and the Faridpur branch. The Southern section is fenced as far as Sonarpur; heyond Sonarpur to Canning there is no fencing. The Diamond Harbour and Budge-Budge branches are fenced. The Central section is fenced throughout.

Curves.—The sharpest curve is of 1,000 feet radius. Gradients.—The ruling gradient is 1 in 30.

Statistics of working .- See pages 131 and 132.

3 (b) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections and Gauhati extension (3' 3%" gauge)-

Details of construction-

The metre gauge section comprises an open mileage of 718 31 miles and may be divided into (1) Northern section. main line, 196.85 miles, branches, 161.49 miles; (2) Behar section, main line, 81.86 miles, branches, 102.42 miles; (3) Dacca section, 85.92 miles; (1) Kannia-Dhubri section, 51.02 miles and (5) Gauhati extension, 35.75 miles. In addition to the above 228.27 miles are under construction.

Sanction was first given to the construction of (1), (2), (3) and (4) of the above-mentioned sections in 1874, 1881, 1882 and 1899, respectively, and they were opened through in 1878, 1889, 1885 and 1902. (5) was sanctioned in 1902

and opened up to mile 45.37 only in 1906.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 50 lbs. and 114 lbs. per yard, on sal sleepers. On the Northern section, Sara to Siliguri, and the Brahmaputra-Sultanpur and Kaunia-Bonarpara branches and on the Gauhati extension the rails are 50-lb.. On the Behar and Kaunia-Dhubri sections, Manihari Ghat to Dhubri, the greater part of the rails are 50-lb., and the remainder are 41\frac{1}{2}-lb. On the Kosi branch and the Dacea section the rails are all 41\frac{1}{2}-lb. On the Barsoi-Kissenguage branch the rails are mostly flat-footed inon. 40 lbs. per yard, the remainder being 41\frac{1}{2}-lb. steel. The sleepers are mostly sal, but there are also metal sleepers of various types.

Ballast.—The whole of the line, except the portion from Golokganj Junction to Dhubri, the Kaunia-Bonarpara branch and the Gauhati extension, is ballasted or shortly to be ballasted. The ballast is brick, stone and shingle.

Fencing.—The whole of the 3'3\frac{3}{2}' gauge lines are fenced, except the Brahmaputra-Sultanpur, Barsu-Kussengunge and Kaunia-Bonarpara branches, the Gauhati extension and the portions from Golokganj Junction to Dhubri and Dacoa to

Curves. - The sharpest curve is of 1,416 feet radius.

Gradients .- The ruling gradient is 1 in 200.

Terms of contracts .- Nil. The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

3 (t) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta-Kurigram branches, and the British section of the Santrabari extension (2' 6" gauge)—

The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904. The Teesta-Kurigram branch was originally a pertion of the 2'6" gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dhailla branch. The line from Teesta Junction to Mogalhat has been converted to the 3'8\superagrammath{g}" gauge to form an integral part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

Details of construction-

The Ranaghat-Krishnagar branch is 20.25 miles long. Its construction was sanctioned in 1895 and it was opened in

The Teesta-Kurigram branch is 1499 miles long; it was opened in 1881.

The British section of the Santrabari extension of the Cooch Behar State railway is 1979 miles long. Its construction was sanctioned in 1897 and it was opened in 1901.

Permanent-way .- On the Rauaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25-lbs. per yard; the sleepers are pynikade and sal. On the Santrabari extension the rails are flat-footed iron, 40-lbs. per yard, and flat-footed steel, 41\(\frac{1}{2}\)-lbs. per yard, laid on sal sleepers.

\*\*Ball\*\*\*I.\*\*—The Ranaghat-Krishnagar branch is brick ballasted; the Teesta-Kurigram branch is not ballasted; and the

Santrabari extension is now being ballasted with stone.

\*\*Pencing.\*\*—No lines on the 2' 6" gauge are fenced.

\*\*Curres.\*\*—The sharpest curve is of 500 feet radius.

Granicals -No grade on the Ranaghat-Krishnagar and Toesta-Kurigram branches exceeds 1 in 200. On the Santrabari extension the ruling gradient is I in 100, and there is a short grade of I in 50 near the terminus (Jainti).

Terms of contracts.-Nil. The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

l. des

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 3 RAILWAY SYSTEM—contd.

3 (a) and (b) Eastern Bengal (State) railway (5'6", 3'33" and 2'6" gauge sections)—contd.

alondar year.	Capital outlay to end of each year.	Gross ournings,	Not earnings.	Percentage on capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Remares.
879 880	Rs. 6,23,44,176 6,33,72,354	Rs. 60,22,272 66,91,060	Rs. 25,79,314 33,75,186	4:11 5:33	Rs. 28,51,165 29,27,692	Rs	Ite, 3,67,326 5,34,050	Bs. 6,39,177 87,456	
881 882 888 884	6,39,51,905 6,50,12,346 7,01,85,028 6,58,68,000 7,31,60,273	75,05,736 85,79,404 80,73,465 78,12,979 72,85,916	42,96,106 47,17,459 47,10,716 24,86,526 25,25,336	6:70 7:26 6:70 3:77 3:45	28,50,922 27,92,607 29,48,783 15,92,486 21,82,794	7. 3,50,920 7,22,920	8,24,125 8,95,229 4,98,223 	+ 6,11,359 + 10,29,528 + 12,63,710 + 5,37,120 - 3,50,379	
886 887 888 889	8,00,56,752 8,11,53,166 8,59,00,629 8,79,71,516 10,00,68,646	82,73,918 94,30,390 1,05,19,210 1,11,76,674 1,14,78,382	30,89,720 45,04,783 55,25,424 <b>a</b> 61,91,625 60,70,323	3·86 5·55 6·44 7·04 6·07	21,31,239 41,71,008 28,83,744 30,11,703 30,96,150	19,04,750 14,90,152 20,11,011 20,43,953 18,14,110		-12,19,269 -11,56,378 +6,30,669 +11,28,969 +11,60,063	
891 898 893 894	10,31,46,023 10,60,47,419 10,68,29,000 10,78,52,685 10,71,92,132	1,26,75,446 1,15,56,446 1,20,51,147 1,40,15,726 1,45,09,789	65,32,100 62,33,727 66,35,188 83,53,559 89,74,174	6:33 5:88 6:21 7:78 8:37	33,97,743 38,86,181 39,53,310 41,01,624 41,50,415	17,52,621 16,5 <b>9,922</b> 16,49,185 18,91,850 18,72,565	 	+ 13,82,736 + 6,93,624 + 10,32,648 + 23,60,045 + 29,51,494	*Represents pay
896 897 898 899	10,97,80,618 11,47,60,205 11,78,51,619 12,16,19,777 12,58,52,617	1,50,81,670 1,47,62,233 1,17,17,879 1,56,12,426 1,71,00,160	90,02,286 80,60,612 83,35,064 83,01,083 92,40,424	8:20 7:02 7:07 6:82 7:35	41,06,132 42,80,503 43,89,856 45,00,276 47,02,516	17,56,150 16,53,278 15,75,020 15,02,391 15,66,769	····	+ 31,40,004 + 21,26,831 + 23,70,688 + 22,38,116 + 29,77,139	ment made to the Brahms putra-Sultan- pur Branch- Railway Con pany up to le
901 902	13,19,95,226 13,99,82,381 11,91,79,763 15.89 84,5/5 19,04,12,932	1,65,99,140 1,78,93,098 1,81,52,429 1,94,63,098 2,03,73,194	80,08,251 91,48,340 88,57,694 88,23,472 96,19,004	6:29 6:54 5:94 5:55 5:05	41,11,665 41,25,883 47,10,867 50,38,9% 56,28,038	28,37,123 23,29,895 23,33,377 28,33,925 23,83,730	*33,597	+ 18,59,499 + 23,92,562 + 18,12,850 + 14,16,915 + 16,57,896	April 1904, or account of sur plus profit and other ad justments.
906 -	20,23,66,593	2,16,31,081	1,06,08,661	5 . 24	63,28,666	<b>23,33,9</b> 25		+ 19,46,070	
				TABL	E II.				
		3	(a)				3 (b)		

										***						
				1		3	(a)					3 (b)				
(	Calon	dar	year.		Eastern, nd Centr (5' 6" g	il sections auge).	Calcutta n Eastern (5' 6" g	Hertion	Northern (Star (3' 34" )			Dhurlla caugo).	Kauma-Dh and Gauhat including th Krishuagar Kurigram t the British	Behar and abrinestions i extension, to Runnghat and Terstambles and section of barr extension and 2'6"	Daoca : (8′ 3∦″ ;	
				1	Sarnings per mile per week.	Pro: of oxp: to curnings.	Earnings per mile per week	Pro: of exp: to earnings.	Earnings per mito per week.	Pro: of oxp. to carnings	Earnings per mile per wcok.	Pro. of exp: to earnings	Earnings per mile per week.	Pro. of exp: to earnings	Enrungs per mile per woek	
				1	Rs. 94		Rs.		RsJ		Rs.		Rs.		Ra.	
1862 1853	•	•	•		119	55.59 48.43	36 58	128:39 131:07			•••					
1864	:	:	:	1	176	5 (-67	53	137:03						:::		
1865				٠!	233	48.98	75	114-32					· · · ·		:::	
1866				٠	243	51.05	79	118:59					١.		l	
1867			•	٠l	279 308	48·71 46·33	64	133.60					`			1
1869 1869	•	•	•	١.	313	50.29	60 55	173-12			•••					
1870	:	:	. :	1	335	55.69	55	145.54	.::	· · · ·			l :::	:::		
1871				.1	. 270	56.01	40	20.82	1						l	ł
1872	:	·	:		314	66.60	40	92.07	:::				:::		:::	
1873		•		٠.	377	49*08 52*18	70	102.56								***
1874 1875	•	•	75	١.	483 356	62.16	68 71	78.85 80.48				,				
	•	•	•	1	401	43.66	68							•••		•••
1876 1877	:	:	:	1	529	41.07	81	108·62 81·74	20	140-29						
1878				. [	512	43.71	96	75.08	81	75.31				:::		
1879			•	٠.	491	45.97	92	66.11	101	99-96				•••		
1880	•	•	•	١.	540	44.81	98	71:02	111	60.10					•••	
1881	•	•	•	٠l	621 611	40.91 40.60	104	66.13	137	51.23		::a		•••		
1882 1888	•	•	•	: [	466	50.14	130 109	97·42 54·97	160 169	49.01 49.20	25 33	92·97 81·19		•••		***
1884	:	:	:		422	54.06		ال. ــــــــــــــــــــــــــــــــــــ	156	69.93	39	78-26			:::	***
1885	•	•	•	٠l	380	61.25	Included	with Fast-	153	70-16	31	107:29			47	141.12
1886				1	403	61.97	tern and	Southern	189	52.85	29	122-87			56	333.40
1887	:	:	:	1	268	52-23	Peccions.		169	02 00	217	132 07			36	111.47
1888				٠l	546	47.47	•		Included			Southern	Included	with Easte:	rn and So	thern sec
1889 1890	•	•	•	١.	563 521	44.60 47.13	•			(	ions.			tio	DH.	
	•	•	•		562		•••	•••			***		•••			***
1891 1692	:	•	:	1	562	48.61 14.32							181 165	55.48 47.32	93 85	61:40
1848	•	:			529	43.71	,	•••					182	45.17	96	62.41
1894	•	•	•	٠l	621	40.33		<b>350</b> 0			•	•••	191	89.14	112	54.46
1895	•	•	•	١.	649	85.97		•••	•••	•••			199	40 29	120	51.49
1896 1897	•	•	•		676	39·74 46·49		•••				•	212	40.04	115	53.27
1898	:	:		:1	652	41.86	l :::	•••			***	···	195 201	42.41	114 129	55:92 51:68
1899	:	:			649	43.30		:::	i :::				218	42.31	131	55.78
1900	•	•	•		689	47.75		•••	,				245	42.14	146	5 8.83
1901	•			۰[*	678	20.89	٠						225	46.91	187	65-12
1902 1903	•	•	•	·I	728	48·18 50·27			·	•••	)		235 239	48.65 50.14	146	62.12
1904	:	:	:	:1	751	53.14	***						233	55'89	144 145	78°25
1905		:	·		618	54-61					***		241	48.77	155	67:29
1906				١.	545	58 91							243	54.08	190	56.74
			, •	ŧ			***	•••					1			

# History of railways constructed and in progress. [For Indox see page 112.]

Number  $\frac{\text{Main head 3}}{\text{Sub-heads (a) to } v(l)}$ . EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.

3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3' 3%" and 2' 6" gauge sections)—concld.

Statistics of working-concld.

The tables below show the statistics of working of the Central section, the Brahmaputra-Sultanpur and Ranaghat-Krishnagar branches before they were purchased by the State.

Central section (late Bengal Central railway) (5' 6" gauge).

						•	Тавсе 1.				Tabi	e II.
	Calone year			Capital outlay to end of each year.	Gross earnin	Net carnings.	Porcentage on capital outlay.	Interest.	Company's share of not exercings	Gain or loss to the State.	Enrangs per mile per week.	Proportion of expenses to earnings.
881 882 883 884	:	:	:	R <sub>S</sub> 10,51,983 46,35,955 79,36,235 90,54,719	Rs.  1,07,954 4,54,837	R-,  39,390 1,19,682	···	R <sub>6</sub> , 51,616 1,85,534 3,17,449 3,62,189	Re	Rs. 51.616 1,85 531 3 56,839 4,81,871	Rs.  64 76	136:50 126:31
885 886 987 858		:		90,01,061 89,65,705 91,09,422 92,53,170	5,95,550 5,67,340 6,18,494 7,12,094	8,203 - 42,528 - 7,928 1,58,145	0 09  1 71	3,60,162 3,75,210 4,60,840 5,19,942		-3,51,929 -4,17,758 -4,68,763 -3,61,797	82 87 100 110	98·46 102 70 101 22 77·62
889 890 891 892	:	:	•	94,46,671 96,88,212 99,44,845 1,00,65,784	7,37,191 • 6,67,504 8,11 6 6 7 60,347	2,95,967 2,45,907 9,27,786 3,12,993	3°13 2 54 3 30 3 11	5,18,693 4,09,962 4,72,483 5,30,351	58,992 73,429 74,600	$\begin{array}{c} -2.22.765 \\ -2.53.047 \\ -2.18,175 \\ -2.91.948 \end{array}$	113 103 125 118	59:85 63:18 59:62 59:33
8 <b>93</b> 894 895 896	:	:		1,00 88 953 1,0, ,11,094 1,0),77 466 1 06,98,927	7,83,529 8,00,179 9,47,831 9,33,563	3,14,992 2,41,182 2,98,569 3,44,465	3 13 2 37 3 92 8 20	5,57,007 6,11,415 6,08,944 5,69,175	79,647 85,023 91,306	-3,01,662 -3,70,2/3 -2,95,158 -3,16,016	121 126 146 144	59°80 60°92 57°90 62°85
997 898 899 .900	:	:	:	1 17,36,810 1,23,58,300 4,26,75,029 1,26,9 <b>6</b> ,415	11,08,769 10,21 657 11, 0,080 13,35,119	5,16,972 8,68,008 4,11,818 5,50 699	410 298 348 434	5,36,800 5,19,231 5,07,035 5,04,985	95,271 1,20,642 97,581 1,21,611	-1.15,158 -9.71,865 -1.62 803 -78,897	175 158 158 185	56 98 64 98 61 28 58 70
901 902 903 904 905	: : ! 1 st h ! 2 n l h	alf ulf	•	1,39,74,075 1,31,11,445 1,31,55,945 1,31,50,812 1,31,77,027	14,05,143 13,17,214 15,08,506 15,59,668 6,66,363	6,42,940 5,73,418 5,07,425 5,89,679 1,58,575 Amalgamated	4:96 4:08 3:85 4:10 1:0 1 with the Easte	5.08,291 5,11,298 5,15,051 5,15,679 4,475 rn Bengal (S	1,46,144 1,53,667 1,21,830 1,36 567 38 525 tate) railway.		194 182 209 216 181	54*25 56*43 60*36 65*40 76*20

# Brahmaputra-Sultanpur (3 33" gauge) branch.

						Ţ	<b>а</b> вы 1.				TABI.	E II.	
Cal	enda	<b>ir</b> yo	ur.	Capital outlay to end of each year.	Gross earning .	Not carning .	Perceutage ou capital outlay.	luterest.	Company s share of net carnings.	Gran or loss to the State.	Darnings per mile per week.	Proportion of expenses to carnings,	Renares.
**** m				R.	R4.	Rs.		Rr.	R∢.	Es.	Ки.		
1897 1898 1699 1900	:	:	:	2 02,919 12,35,457 19,58,137 24,20 8/1 28,27,619	38,300 1,36,587	   61,375	   	   42,414		+ 18,961	 38 58 61	45.00 45.00 45.00	Not earnings during 1899 and 1800 were paid over to the Company and interests up to 1900 were charged to capital.
1901 1902 1903 1804	:	:	:	29,17,09; 29,42,486	2,40,424 2,54,379	1,32,233   1,99,908 nuted with th	4.75 4.75	86,750 88,185	9,480 22,742	+ 36,003	78 82 	45:00 45:00	

# Ranaghat-Krishnagar (2' 6" gauge) branch.

					Table I.				Тав	LE II.
**	Calendar year.	Capital outlay to end of osch year.	Gross carnings.	Net earnings.	Porcontage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week	Proportion of expenses to earnings.
1898 1849 1900 1901 1902 1903 1904	f let half	Rs. 7,22,369 7,27,800 7,51,809 7,51,157 7,51,158 7,48,657	Rs. 46,349 69,802 69,117 76,180 86,484 40,861	1ts.  8,415 19,442 15,185 21,353 33,832 12,160 Amalgament	2·59 2·59 2·02 2·84 4·55 ed with the E	Rs. 12,352 9,472 1,465 15,960 5,674 2,876 astern Bengs	Rs. 20,767 28,914 16,650 37,313 39,506 15,036 1 (State) rail	2·85 3·85 2·22 4·97 5·31	Rs. 59 66 06 72 52	81:84 71:95 78:08 71:97 60:86

# History of railways constructed and in progress.

[ For Index see page 112.]

Main head 3 Number Main head 3 EASTERN BENGAL (STATE) RAILWAY SYSTEM—conld.

# 3 (c) Mymensingh-Jamalpur-Jagannathganj Branch railway (3' 33" gauge)—

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal (State) railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services.

### Details of construction-

This railway is 53.22 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on sal sleepers

Ballast.—The line is ballasted throughout with brick.

Fencing .- The line is fenced only at stations and through the town of Mymensingh.

Curves.—The sharpest curve is of 2,864 feet radius.

Gradients.—The ruling gradient is 1 in 300.

### Terms of contracts-

The Mymonsingh-Jamalpur-Jaganuathganj branch railway is worked under the following contracts:-

Contracts of-Gth January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj tranch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj branch railway office from Calentta to London.

The general conditions of the contracts are as follows:-

Government aid .- Government in respect of each year allow to the Mymen-singh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 31 per cent. per annum on the actual capital expenditure. Land has been provided free of charge.

Currency of contracts .-- Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly not carnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts .-- Nil.

Terms of working .-- After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fures .- To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal (State) railway.

### Statistics of working-

										TABLE	I.					TABI.	z II.
		C	lond	ar y	oar.				Capital outlay to end of cach year.	Gross carnings.	Not carnings.	Percentage on capital outlay.	Rebate from E. B. S. Ry.	Total income.	Porcentage on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings
									Re.	Rs.	Rs.		Rs. •	Rs.		Rg.	
896 897 898 899 1900	:	:	:	:	:	:	:	:	1,950 5,54,688 10,44,638 16,11,248 18,78,395	7,660 66,499 1,62,028	 4,213 86,575 89,116	 0·40 2·27 4·74	::: ::: :::	4,213 36,575 89,116	0.40 9.27 4.74	 27 35 58	45·0 45·0 45·0
901 902 908 904 905	:	:	•	:	:	:	:	:	20,81,846 22,85,677 23,28,917 23,51,113 23,86,029	1,67,756 2,05,251 2,22,825 2,21,168 2,16,642	92,265 1,12,888 1,24,993 1,21,312 1,18,748	4·43 4·91 5·37 5·29 4·98	  	99,265 1,12,888 1,24,993 1,24,312 1,18,748	4·94 5·37 5·29	60 74 82 81 81	45 0 45 0 48 9 43 7 45 1
906	:	:							24,15,248	2,72,929	1,50,030	6.21		1,50,030	6.21	103	451

# 3 (d) Cooch Behar railway (2' 6" gauge)-

# Details of construction-

This railway is \$3.60 miles long, consisting of main line, 22.15 miles, and branch, 11.45 miles known as the Native State section of the Cooch Behar-Santrabari extension. Its construction was sanctioned in 1891 and it was opened throughout in 1900.

Permanent-way .- The line is laid for 19.55 miles with 25-lb. and for 1.68 miles with 411-lb. steel rails on sal and pyinkado sleepers, and for 12.22 miles with 40-lb. iron rails on sal sleepers. All rails are flat-footed.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 3}}{\text{Sub-heads }(a) \text{ to }(\overline{d})}$ . EASTERN BENGAL (STATE) RAILWAY SYSTEM—concid. 3 (d) Cooch Behar railway (2' 6" gauge)-concld. Details of construction-concld. Ballast .- The line is laid without ballast. Pencing.—The line is unfenced.
Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract-

The Cooch Behar railway is worked under the following agreement:-

\*Agreement-of 15th June 1903, having effect from the 1st January 1901, (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the agreement are as follows :-

Government aid .- The line is the property of the Cooch Behar State. .

Currency of agreement. - The Eastern Bengal (State) railway to maintain and work the Cooch Behar State railway

for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal (State) railway to receive 40 per cent. of the gross earnings for maintenance, and working; provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding, 45 per cent. of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares .- The Eastern Bangal (Stee) railway alministration have full control over rates and fares.

\* [Norn.-The revision of this agreement is under consideration.]

Statistics of working-

												,	l'abl	кI.						TAD	LE II.
		•				Cal	enda	r y0a	r.							Capital outley to end of each year.	Grova ogenings.	Net carmings.	Per cent. on expital outlay.	Earnings por mile per wock.	Pro : of oxp : to earnings.
be sure	٠. ٠															Ra.	Rs.	Rs.		Re.	
1891 1892 1893 1894 1895		•	:	:	:	:	:	:	:	:	:	:	:	:		14,685 4,69,136 6,65,172 7,14,818 7,30,953	5,846 40,280 53,174	 2,455 5,576 10,200	  1 29 2 63	  15 85 46	 188:94 78:71 63:89
1896 1897 1893 1899 1 <b>900</b>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	7,66,704 9,01,219 16,32,938 12,99,031 12,83,996	70,128 64,162 66,124 82,776 94,792	38,570 35,344 6,687 43,073 51,602	5:03 8:92 6:65 3:32 4:02	61 51 57 53 50	45*00 45*00 45*00 47*95 43*41
1901 1902 1903 1904 1905	:	:	· :	:	:	:	:	:	:	:	:	:	:	:	:	13,94,923 13,95,7/6 14,91,329 14,71,331 14,82,893	1,27,596 1,24,741 1,42,540 1,47,575 1,48,488	71,667 74,452 53,834 86,996 87,318	5:35 5:33 5:62 5:91 5:88	72 71 82 84 85	41:48 40:31 41:19 41:05 41:20
1906		•			•				•			•	•	•		14,87,786	1,68,751	77,815	5.23	97	53.89

Number Main hoad 4 Sub-hoads (a) to (d). EAST INDIAN RAILWAY SYSTEM-

Chairman .- Bazett Wetenhall Colvin, Esq. Secretary .- Charles W. Young, Esq.

Offices .- Nicholas Lane, London, E. C. Lines comprising the system.—The East Indian railway system is made up of-Under construction Open line. or sanctioned for Total construction. Miles. 258'72 Miles. 2,423.76 162.86 78.76 Miles. 2,165.04 (a) East Indian railway (5' 6" gauge)
(b) Delhi-Umballa-Kalka railway (5' 6" gauge)
(c) South Behar railway (5' 6" gauge)
(d) Tarkessur railway (5' 6" gauge) 162:36 78:76 22:23 ••• Total 2,128.39 258.72 2,687:11 Bunning powers-Own line over Foreign lines: —
Agra. Fast Bank to Agra Fort, Rujpniana-Malwa railway
Agra. Fast Bank to Agra Fort, Rujpniana-Malwa railway
Naihati to Broos Bridge Junction and Chitpore, Fastern Bengel (State) railway for goods trains only
Moghal Sarai to Benares Cantonment, Oudh and Echilkhand (State) railway, for passenger trains only 84·50 10·00 Foreign lines over Home line:

Bougal-Nagpur railway at Katni
Bougal-Nagpur railway at Katni
at Asansol
in thowas
Acra to Taudla
for passenger tra 45.50 Total 0.30 Great Indian Poninsula railway, Agra to Tandla for passenger trains only at Cawnpore for passenger trains only for goods trains only at Manikpur . . . . or passenger and goods trains. for North-Western and Oudh and Robilkhand (Stato) railways, Ghaziabad to Delhi 13.00 Total 30.02

History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) to (d). EAST INDIAN RAILWAY SYSTEM—contd.

4 (a) East Indian railway proper (5' 6" gauge)-

Details of construction-

The open mileage of the East Indian railway proper is 2,165.04 miles. This may be divided into (1) main line (Howrah to Delhi), 955.08 miles; (2) Grand Chord line (Sitarampur to Moghal Sarai), 281 miles; (3) Loop line (Khana junction to Kiul), 250.39 miles; and (4) branches, 678.57 miles. Of the above 518.27 miles are double and 2.20 miles triple line.

There were in addition 258.72 miles of single line sanctioned for construction, of which 143.32 miles are actually under construction. 13.60 miles of existing single line are also in course of being doubled. The first sanction to constructing the main line was given in 1851 and it was opened throughout in 1871. The Loop line was opened in 1862 and the Grand

Permanent-way.—The main line from Howrah to Delhi, including the Grand Chord, the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrab branch, Giridih branch, Patna-Gya branch, Baran-Daltonganj branch, Agra branch and Shikohabad-Farukhabad branch are laid with steel rails throughout. A few short branches are still laid with iron rails, but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations,

On both up and down reads of the main line from Howrah to Mokameh, a distance of 284 miles, the rails are 85-lb. bull-headed, with the exception of a few short lengths which still remain to be relaid. S5-lb. bull-headed rails have also been laid on the single line between Moghal Sarai and Khaga, a distance of 147 miles, and Sitarampur to Paharpur, a distance of 134 miles. The rest of the main line and branches are laid with double-headed rails weighing 75 lbs. per yard.

As at present laid, about thirty per cent. of the sleepers are wood and the remainder are iron. The wooden sleepers

principally consist of sal and deedar; but of late Jharrah and Australian hard wood sleepers have also been put into the road. The chairs are east iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs. each.

Ballast .- The line is ballasted throughout with stone.

Pencing.—The line is fenced throughout, except on the Damuda, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Baran-Daltonganj and Shikohabad-Farukhabad tranches, the Ondal loop and the Ondal-Sainthia and Dhanbaid-Jharia chords. The Grand Chord is being fenced.

Curves.—The sharpest curve is of 1,525 feet radius.

Gradients.—The rating gradient of the main line is 1 in 300, except between Raneegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha, and on the Grand Chord the raling gradient is 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient of the Loop line, the Ondal-Sainthia Chord and the Jubbulpore branch is 1 in 200. Terms of contracts-

The railway is worked under the following contracts :-

Contracts of -22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the in orporation of the following State branches in the undertaking :- (Phazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Baukipore junction to the right bank of the Ganges at Digha Ghat); Jharia (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Khairashat, Nundi to Panuria and Salaupur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital 22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway. 14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows:-

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deforred portion, i.e., one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts.—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1830, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase

price was £32,750,000,\* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, 26,200,000 6,660,000 Prompany's stock at date of purchase Promum of 25 per cent. ... 82,750,000 payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital

sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

Nors .- Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

Power of Company to surrender contract. - See currency of contracts.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided

# History of railways constructed and in progress: [For Index see page 112.]

Number Main head 4 Sub-heads (1) to (1) . EAST INDIAN RAILWAY SYSTEM—contd.

Net carn-

ings.

4 (a) East Indian railway proper (5' 6" gauge)-concld.

Gross

carnings.

Terms of contracts-conold.

in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupces is divided in proportion of four-ten-fifteenths to Government and one-fifteenth to the Company.

\*Rates and fares.\*\*—Cortain maxima and minima rates and fares have been fixed within which the Company is

permitted to vary rates.

Statistics of working -

Calendar

year.

Capital outlay to end of each year.

TABLE I,

Interest.

Annuity.

Company's slure of net

oarnings.

Gain or loss to the State.

REMARKS.

Per cent, on capital outlay,

_		- 1											- 1,		1		
1879 1880	. 31,32	Rs. 177 360 177,327		5. 16,730 04,947	R- 2,86,1 2,86,7	4 479	8.34 8:05	1,65 *1,98	₹4. ,74,363 ,06,263	с R 		Rs. 61,25,87 17,72,69	7 +	Rs. 59,14,239 70,93,08:	2 ( * In	terest in i	1880 in-
1841 1882 1883 1884 1885	35,07 35,21 35,57	.63.677 .21,455 .91,304 .::8,760 ,96,619	4,71,1 4,94,0 4,38,1	11,472 17,591 17,085 38,714 86 914	3,08,3 2,96,5 3,11,5 2,73,2 3,30,1	67,036 (0,950 (2,003	8:84 8:46 8:84 7:68 9:21	35	.05,426 (,81,761 (,16,170 (,58,035 (,13,062	1,73,92,0 1,73,92,0 1,72,57,7 1,78,50,4 1,79,77	00 72 59	20, <b>63</b> ,86 17,8<,07 19,99,73 11,72,32 16,29,50	7 + 3 + 1 + 2 +	82,73,745 71,95,243 80,77,303 47,41,189 95,93,48	3 ge 9 so 7 8	s, which o	
1686 1887 1888 1889 1590	36,13 36,09 36,19	1,85,918 1,14,631 1,27,530 1,22,300 1,22,758	4,60,0 4,51,1 4,19,1	70 853 65,661 36,902 57,901 57,665	3,05,1 2,13,3 3,03,3 2,94,0 2,98,2	4,263 5,075 6,230	8:16 8:67 8:40 8:12 8:21	41 4( 4)	0,91,104 0,70,944 0,73,297 1,84,108 1,83,278	1,89,50,13 1,92,13,3 2,93,43,5 2,99,60,0 2,03,43,5	33 30 00	14,97,27 15,97,25 11,64,69 -8,31,34 10,37,01	2 +	60,74,84, 64,62,73- 47,53,55, 31,28,77, 42,62,98	4 5 5		
1891 1892 1893 1894 1895	36,2 36,9 37,2	1,18,827 1,97,506 1,20,357 1,36,356 1,18,029	4,91, 5,08, 5,26,8	87,001 11,600 14,654 89,485 50,856	3,60,3 3,48,1 3,60,9 3,64,2 3,78,3	6,719 $04.293$	9:97 9:60 9:78 9:78 10:00	37 41 45	1,93,426 7,25,754 1,26,889 3,37,988 4,76,681	1,86,91,0 2,06,47,1 2,34,46,7 2,43,89,5 2,61,01,1	64 80 82	26, <b>1</b> 5,39 20,88,76 1 <b>7</b> ,04,12 15,39,76 14,29,07	0 + 5 + 7 +	,03,04,15 80,55,04 68,16,49 61,59,06 57,30,84	1 9 8		
1896 1897 1898 1899 1900	39,39 40,7 42,70	7,66,003 ),91,173 1,94,336 ),40,208 3,43,540	5.97,3 6,35,	39,142 24,013 96,060 45,974 74,972	3,67,7 4,11,9 1,08,0 4,26,6 1,17,1	03,469 07,269 60,018	9 61 10 53 16 02 9 99 16 10	48 50 51	5,90,562 5,20,238 5,16, 44 5,64,902 5,18,054	2,18 : 9,4 2,47,11,4 2,32,64,5 2,21,45,5 2,15,60,9	06 33 16	12,45,73 25,87,76 24,99,24 36,09,92 18,09,10	3 + 4 + 0 + 1,	49,81,93 95,51,06 99,96,973 ,20,39,68 ,53,27,45	2 8 0		
1901 1902 1903 1904 1905	47,00 48,7 50,20	5,59,069 5,40,852 9,61,154 6,09,029 8,72,727	6,77,. 6,99, 7,59,	96,635 38,713 72,699 71,544 47,139	4,57,1 4,29,8 4,63,9 5,05,6 4,81,F	10,8 13 18,122 11,422	10:01 9:13 9:52 10:06 9:16	71	1,16,878 1,31,192 1,16,971 1,23,978 1,75,860	2.16,82,7 2,16,46.8 2,16,15,0 2,16,15,0 2,16,15,0	68 00 00	18,51,45 16,19,96 16,82,23 20,64,27 18,62,97	$ \begin{array}{c cccc} 5 & + 1, \\ 1 & + 1, \\ 6 & + 1, \end{array} $	,56,32,62 ,26,79,50 ,56,54,82 ,88,61,16 ,60,32,10	8 0 8		
1906	. 54,79	,28,490	8,02,	0,910	1,87,9	0,504	8.50	94	,11,920	2, 16, 15,0	00	18,50,03	9 +1,	59,00,51	.J		
	1		1		1			TABI	E II.	7		1		<del></del>		1	
	ì	Indian gauge).		m-Uja gauge).	1	dhati gaugo).	Dildar Ghaz (5′ 6″ g	ippr		i	Indian gauge).	1	ea-Gya gaugo).	Na (4' 0" g	Ihati gaugo).	Dildae Chaz (5' 6" g	nagar- ipur gange).
Calendar year.	Earn- ings po mile pe week.	ri corn.	per	Pro : of exp : to earn- ings.		Pro · ef exp : to earn- ings			Calendar year.	Earn-	Pro: of exp: to earn- ings.		Pro: of exp: to earn-ings.		Pro : of exp : to earn- ings.		Pro: of exp: to earn- ings.
1654 1855	Rs. 131 108	62·18 51·97			Rs		Rs	:::	1881 1882 1883 1884	601 630 558	31:85 36:94 36:95 37:61	Rs. 178 184 159 174	65:11 60:51 51:93 57:48	Rs. 47 51 57 55	79·20 73·05 69·63 90·94	Rs. 63 73 80 75	99·52 85·24 49·87 58·87
1856 1857 1858 1859 1860	167 232 279 258 231	40°6: 38°1: 40°4: 44°7' 48°30	3						1845 . 1886 . 1887 . 1888 . 1880 .	589 591 583 567 557	35-25 34-59 31-70 33-24 34-59	174 180 178 168 175	52·52 52·01 46·53 47·97 48·70	54 59 65 74 73	85:29 70:57 78:39 78:18	75 76 77 71	52·28 52·05 40·45 91·13
1861 1862 1868 1864 1865	240 192 222 253 311	46.41 53.8 55.0 50.73 44.8			36 41	49.89 63.28		:::	1891 1892	615 587	27:21 28:47	201 193	45.80 42.76 42.94	71 66 Conver	78.01 62.97 rted to	:::	***
1866 1867 1868 1869 1870	374 369 346 899 424	44·2 48·9 44·8 44·4 43·6	1 8 2		36 45 57 60 60	105:15 68:81 83:60 59:64 48:77		#:	1893 1894 1r95 1896 1897	584 604 603 597 649	27:44 30:87 31:07 81:98 29:47	:::			· · · · · · · · · · · · · · · · · · ·		***
1871 1872 1878 1874 1875	388 369 382 474 374	43°3 41°4 38°7 35°7 39°8	4 5 0		55 53 60 61 57	58:07 57:13 60:06 67:22 76:42		 	1898 1899 1900	658 697 708 733	31·76 52·84 34·78 35·06	::	***				*** *** ***
1676 1877 1878 1879 1880	452 565 507 552 849	85:0 81:8 35:6 82:9 83:0	8 5 121	55:84 56:18	54 64 64 65 49	111·15 100·47 79·11 67·56 105·33	   	126.83	1902 1903 1904 1905	687 692 749 788 (a) 732	36.55 83.64 83.30 35.74 (a)38.65	:::::::::::::::::::::::::::::::::::::::	***		•••		*** *** *** ***
(a	) Include	a the So	nth Beh	ar railws	y whic	h is now	worked a	s part of	the unde	rtaking.		<u> </u>				,	

History of railways constructed and in progress. [For Index see page 112.]

Main head 4 Number Sub-heads (a) to (1)

# EAST INDIAN RAILWAY SYSTEM-contd.

4 (b) Delhi-Umballa-Kalka railway (5' 6" gauge)-

Chairman .- Colonel Alexander Jerome Filgate, R.E.

Secretary .- C. E. Rutter, Esq. Offices. -- 17, Victoria Street, Westminster, S. W.

Details of construction -

This railway is 162:36 miles long. It was opened throughout in 1891.

Permanent-way .- The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chairs.

Ballast .- The line is ballasted throughout with stone.

Fencing .- The live is fenced throughout.

Curves.—The sharpest curve is of 1,010 feet radius.

Gradients .- The ruling gradient is 1 in 200, except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts-

The railway is worked under the following contracts :-

Contracts of -2 4th January 1859 (between the Secretary of State and the East Indian Railway Company) for working. 12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

> 19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

> 19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January \$593 the 2 per cent. of gross earnings previously retained by Government.

> 24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

> 9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company)

guaranteeing interest at the rate of 31 per cent, on share capital. The general conditions of the contracts are as follows:—

Government and .- By the contract of 9th June 1597 Government supplement the net carnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debegture interest, to pay a dividend of 34 per cent. per annum on their share capital. Land was also provided free of cost.

Currency of contracts. - The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December of any subsequent tenth year. On determination Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts.—Nil.

Terms of working .- Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-tock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 10 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying 52 per cent. to the Company. Surplus profits in excess of 31 per cent. per annum are divided equally between Government and the Company until Government have been renaid advances of subsidy, with interest. Thereafter all surplus profits belong to the Company.

Rates and fares .- To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa they are to be not more than the maximum, nowless than the minimum, rates and fare- in force on the East Indian railway, and in the case of the portion between Umballa and Kalka not more than three times such maximum nor less than such minimum.

Statistics of working-

									TA	BLE I.					TAB	cn II.
	c	alen	dar 3	ear.			,	Capital outlay to end of each year.	Gross	Not enra-	Percentage on equital outlay.	Govern- ment.	Total income.	Porcentage of total income on capital outlay.	Earnings per milo por week.	Proportion of expenses to earnings
1889								Rs 59,90,835	R4.	Re.		R4.	Rs.		Re.	
1890	:	:	:	:	÷	•	•	1,35,55,180	•••				•••			:::
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	1,55,44,692 1,58,22,137 1,55,24,600 1,55,25,547 1,65,06,120	9,07,697 10,81,769 11,98,509 13,37,526 14,60,519	4,72,002 5,62,520 6,23,234 6,95,514 7,59,470	3.64 3.56 4.01 4.48 4.90		4,72,002 5.62,520 6,23,224 6,95,514 7,59,470	3 04 8 58 4 01 4 48 4 90	128 129 143 159 174	48:00 48:00 48:00 48:00 48:00
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	1,54,49,783 1,53,26,585 1,53,43,587 1,53,01,272 1,53,15,467	13,18,840 15,73,319 16,07,512 14,49,378 13,72,528	6,85,797 8,18,126 8,85,906 7,29,511 7,13,712	4:44 5:34 5:45 4:77 4:66		6,85,797 8,18,126 8,35 906 7,29,541 7,13,712	4:44 5:31 5:45 4:77 4:66	158 166 191 172 163	48:00 48:00 48:00 48:60 48:00
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	1,52,92,648 1,54,23,791 1,55,49,998 1,55,51,768 1,56,07,409	18,05,858 18,66,695 18,30,960 18,58,478 20,16,936	9,39,046 9,70,681 9,52,009 9,63,807 10,48,507	6°13 6°29 6°12 6°18 6°72	***	9,39,046 9,70,681 9,52,099 9,63,807 10,48,907	6 14 6 29 6 12 6 19 6 78	218 221 216 218 238	48.00 48.00 48.00 48.00 48.00
1906								1,57,26,839	20,04,218	10,42,194	6.63	***	10,42,194	6.63	237	18:00

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main hood 4}}{\text{Nub-heads }(a) \text{ to }(d)}$ . EAST INDIAN RAILWAY SYSTEM—contd.

4 (c) South Behar railway (5' 6" gaugo)-

Chairman .- Sir Henry S. Cunningham, K.C.I.E.

Secretary .- E. Z. Thornton, Esq.

Offices .- 45, Queen Anne's Gate, Westminster, S. W.

### Details of construction-

This railway is 78.76 miles long. It connects Luckeeserai with Gya and was opened in 1899.

Permanent-way. - The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs, and Denham Olpherts' cast-iron plate sleepers.

Ballast .- The line is ballasted throughout with stone.

Fencing .— The line is fenced only near villages, at stations and for a short distance on each side of level crossings.

Curres. - The sharpest curve is of 3,000 feet radius.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.
22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:-

\*Government aid .- Government, in respect of each half-year, allow to the South Behar Railway Company, by way of relate on the share attributable to the Bast Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net carnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 1 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this relate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,10,000 in any half-year. Land was also provided free of cost.

Currency of contracts. - Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England ar amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts .- Nil.

\*Terms of working .- For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross carnings (which may include any single item of capital expanditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

\*Rates and fures .- To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

PAOTE.—It has since been agreed between the Secretary of State and the South Reback which Company that, he had of the net receipts as provided by clause 30 of the contract of the 7th August 1805, a fixed sum by way of read at the rate of Leo,000 per amount as from the 1st January 1918 will be part to the Company by the Secretary of State. The clauses of the same contract relating to the supplication of greece entiries, by the new secretary institutions and working, rates and fares, and other clauses similarly affected, by the new agreement, will be causefully, and provided the maximum of an international states of the same contract relating to the supplication of greece entires, by the the experience of which green and working, rates and fare, and other clauses similarly affected, by the new agreement, will be causefully and understood greece entire the clause of the maximum contractions of an international supplier of the supplier of the supplier of the supplier of the South Behavior of the supplier of the South Behavior of the South Behav

# Statistics of working-

												TABL	e T.						ТАВ	LE II.
•			-	Cal	ondar	yo:	ĸr.					Capital outlay to end of each year.	Gross earnings.	Not earnings.	Percent- age on capital outlay,	Rebute from E. I. Ry.	Total income.	Percent- age of total in- come on capital outlay,	Earnings per mile per week,	Proportion of oxpenses to earnings.
										-	•	Rs.	Кн	Rs.	MAY 25	Ra.	Rs.		Rs.	•
.189	5				•	•	•	•	•	•	•	5,17,983			•••		٠			
189												30,88,036		ľ '						
189	7	•	•	•	•	•	•	•	•	•	•	62,72,315	i	•••	•••	•••	•••	•••		
189			•	•	•	•	•	•	•	•	•	97,45,791	2,03,328	1,32,163		33,403		•••	***	
180 190		:	:	:	:	:	:	:	:	:	:	1,18,16,730 1,23,15,110	4,67,133	3,03,636	1·12 2 47	1,44,404	1,65,566 4,48,040	1·40 3·61	101 114	35.00 85.00
												1,23,66,533	6,11,970	3,08,822	2.50	1,28,082	4,36,901	3.53	125	
190		•	•	•		•	•	:	:	•	•	1,19,88,613	4,99,800	2,74,895	2 29	1,35,415	4,10,340	3.42	123	40.02
190		•	•	•		•	•	•	•	:	:	1,20,01,897	5,21,605	2,88,533	2.40	1.57,708	4,46,241	3.72	128	45.00
190		•	•	•	•	•	•	•	•	·	·	1,19,72,911	5, 70,358	3,13,697	2.62	1,65,3 62	4,79,079	4.00		45.00
190 190		:	:	:	:	:	:	:	:	:	٠	1,19,77,154	5,55,199	3,05,360	2.55	1,72,721	4,78,081	3.88	188 133	45.00 45.00
190	)6		•	•	•	•		•		•	•	.1,19,74,947		See	note abov	е.				

<sup>4 (</sup>d) Tarkessur railway (5' 6" gauge)-

Details of construction-This railway, which connects Scoraphuli, a station on the East Indian railway, with Tarkessur, is 22.23 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

History of railways constructed and in progress. [For Index see page 112.]

Main head 4 Number  $\frac{\text{main head 4}}{\overline{\text{Sub-heads }(a) \ lo \ (d)}}$ . EAST INDIAN RAILWAY SYSTEM—concld.

4 (d) Tarkessur railway (5' 6" gauge) -concld.

Details of construction—conold.

\*\*Permanent-way.—The permanent-way consists of 74-lb. iron rails laid on Denham Olpherts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fonced throughout.

Curves .- The sharpest curve is of 2,700 feet radius.

Gradients.—The ruling gradient is I'in 500.

The railway is worked under the following contracts:-

Contracts of-Sth September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows: -

Government aid .- Land was provided free of cost.

Currency of contracts .- The contract of 1883 terminates on the 7th September 1982; but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years and thereafter at intervals of ten years. In the event of such determination Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

Power of Company to surrender contracts .- Nil.

Terms of working.—From the gross carnings are deducted working exponses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 49 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross carnings as obtains on the East Indian railway system as a whole; 5 per cent, of the gross carnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided

in the proportion of four-fifths to the Tarkessur Bailway Company and one-fifth to the East Indian Bailway Company.

Rates and fares.—Certain maxima have been fixed, and the Company is authorized to charge within those

maxima such rates and fares as may from time to time be mutually agreed upon.

Statistics of working-

												•	l'ari.e L.				Tabl	E II.
	•-			Ċ	Jalen	la <b>r</b> y	onr.	•					Capital out- lay to end of each year.	Ciro-s carning-	Not earnings,	Per cent. on Oupital outly,	Eurnings por mile per week.	Propertion of expenses to carnings
1885			•	•		•	•		•		•		Rs. 16,88,995	R4. 2,62,010	Rs. 1,21,121	7:37	R4. 227	1-2-57
1886 1887 1888 1889 1890	:	:	:	:	:	:	:	:	:	:	:		17,24,717 17,28,410 17,31,822 17,28,138 17,28,773	2,19,003 2,63,793 2,79,717 2,84,895 2,86,526	1,19,136 1,32,274 1,36,780 1,36,578 1,44,283	6:01 7:65 7:84 7:90 8:35	215 228 242 246 218	52:15 42:66 51:10 55:51 49:61
1891 1892 1893 1894 1895	: : :	:	:	:	:	:	:	:	:	:	:		17,29,021 17,32,567 17,47,280 17,47,540 17,50,340	3,05,132 2,93,674 2,83,051 3,06,159 2,08,156	1,63,478 1,54,537 1,50,420 1,56,469 1,59,091	9:45 8:94 8:61 8:95 9:07	264 254 245 265 267	46:42 47:28 46:86 48:96 48:37.
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:		•	17,56,898 17,57,160 17,77,045 17,84,166 17,84,166	3,13,243 3,12,656 3,14,056 3,08,759 0,32,0/5	1,57,005 1,62,563 1,59,461 1,52,491 1,61,132	8 05 9 75 8 02 8 55 9 03	271 270 272 267 288	49.88 48.01 49.54 50.58 51.61
1901 1902 1903 1904 1905	:	*	:	:	:	:	:	:	:	:	:		17,92,293 17,91,612 17,93,985 17,97,555 17,98,615	3,30,390 3,28,510 8,33,924 3,80,635 3,26,715	1,57,928 1,50,348 1,62,741 1,63,006 1,55,221	8:81 8:56 9:13 9:07 8:63	285 283 288 284 282	2:23 58 32 56 96 50 76 52:49
1006													17,99,166	3,51,888	1,58,989	8 84	304	54.82

Number Main head 5 Sub-heads (a) to (b). GREAT INDIAN PENINSULA RAILWAY SYSTEM—

Chairman .- Rt., Hon'ble Sir Andrew R. Scoble, K.C.S.I. Managing Director. - Colonel F. Firebrace, R.E.

Offices.-48, Copthall Avenue, E. C., London. Lines comprising the system. The Great Indian Peninsula railway system is made up of-

-								Open line.	Under construction or sanctioned for construction.	Total.
								Miles.	Miles,	Miles.
(a) Great Indian Peninsula railway		(5' 6" gauge)						1,561 63	45.78	1,607.41
(h) Agra-Delhi Chord railway		(5' 6' gauge)						125 99	•••	125 93
(c) Bhopal-Itarei railway	•	(5' 6" gange)						57:39	•••	57.89
(d) Bhopal-Ujjain railway		(5' 6" guage)	•		•			113 27	•••	113.27
(e) Bina-Goona-Baran railway		(5' 6" gauge)			•			145.63	•••	145.63
(f) Indian Midland railway	٠				•	•	•			809 85
(g) Gwalior Light railway		,	٠.	•	•	•	•	183.23		
(h) Matheran Light railway	٠	(3, 0, &rs&)	•	•		•	•	•••		
•					Tot	al		2,997-29	12478	8,122.07
(/) Indian Midland railway		(2' 0" gauge) (2' 0" gauge) (2' 0" gauge)	,	:	:		:	809-85 183-53 	66 39 12 61	249 8 12 0

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 Sub-heads (a) to (h) . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.
Running powers—
Home line over foreign lines:-

Home line over foreign lines:—  Datar junction to Colaba, Bombay, Baroda and Central India rhilway, for goods trains only At Agra, Rajpatana-Malwa railway, for passenger and goods trains At Cawapore, East Indian railway, for passenger and goods trains At Manukpore, East Indian railway, for passenger and goods trains At Katin, East Indian railway, for passenger and goods trains At Katin, Bengal-Nacapor railway, for passenger trains only At Katin, Bombay, Baroda and Central India railway, for passenger and goods trains At Cawapore, Oudh and Rohilkhand (State) railway, for passenger and goods trains From Cawapore to Lacknow, Ondh and Rohilkhand (State) railway, for passenger and goods trains			7:25 2:89 1:40 0:68 0:38 1:60 0:24 0:86 44:63
Bombay, Baroda and Central India railway. Dadar Junction to Carnae bridge, for goods trains only Bongal-Nagpur railway at Nagpur for Passonger and goods trains	· ·	:	1.39 0.65

5 (a) Great Indian Peninsula railway proper (5' 6" gauge) —
This line was purchased by the State in 1900, but the working was left in the hands of the Company under the terms of a new Contract, dated the 21st December 1900.

Details of construction -

The open mileage of the Great Indian Peninsula railway proper is 1,561 63 miles. This may be divided into North-East line, main line (Bombay to Jubbulpere), 615 10 miles; branches, 384 99 miles: (2) South-East line, main line (Kalyan to Raichur), 408 86 miles; branches, 152 68 miles. Of the above 567 48 miles are double and 4 92 miles quadruple line.

There are under construction 45 78 miles of single line.

First sanction to the construction of the North-East line was given in 1850 and it was opened throughout in 1870.

The South-East line was sanctioned in 1851 and it was opened throughout in 1871.

Permanent-way .- The main line is laid with 86-lb. double-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the ghat sections, is laid with iron pots.

Ballast.—The line is fully ballasted throughout with sand gravel or broken stone.

Fencing.—With the exception of the Mohpani, Chaligaon-Dhulia, and Jalgaon-Amalner branches the line is fully fenced.

Curves. - The sharpest curve has a radius of 990 feet.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasind and Asvali; the ruling gradient on the ghat sections is 1 in 37. Terms of contract-

The railway is worked under the following contract:—

Contract of -21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows :-

Government aid .- Government to pay interest at 3 per cent. per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company, which is at present authorised at £2,575,000. All capital will be provided by the Se retury of State bearing interest at the rate of 3½ per cent. per annum, or at such other rate as may be agreed upon; or will be raised by the Company, by the issue of debentures or debenture stock, at such rate as the Secretary of State may determine. Land was provided froe; but any land acquired after 30th June 1900 is paid for from the capital of the undertaking.

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by

the State in 1900, when all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase £ . 34,959,219 Company's stock at date of purchase . Debentures and debenture stock . Secretary of State and that Company were determined. . 5,922,359 price was £40,781,568,\* payable, up to the 17th August 1949, in the form of a terminable annuity of £1,268,516. Total . 40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction.

Power of Company to surrender contract—Nil.

Terms of working .- From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted-

(i) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(ii) A sum of Rs. 1,00,00,000 which is payable to Government;
(iii) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, 18ths of the surplus are paid to the Secretary of State and 10th to the Company; provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of  $\pi_0^1$ th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth

Rates and furce. - Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

History of railways constructed and in progress.
, [For Index see page 112.]

Number  $\frac{M_{ain \ boad \ 5}}{Sub-boads \ (a) \ to \ (b)}$ . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—contd.

Statistics of working-

	Name of the Control o	angan, magamusa sa sanda da di	Тапт	.в I.		١.			TAB	LE II.	<del></del>
Calendar year.	Capital cutley to end of each year.	Gross carnings.	Not carnings.	Per- centage on capital outlay.	Guaran- teed interest.	Annuity,	Com- p.my's share of net earnings.*	Gain or loss to the State.	Calendur year.	Farn- ings per mile per week.	Pro: of exp: to exrn- ings.
1879	R4. 25,59,56,152	Rs. 2,52,48,315	Rs. 1,01,90.602	3:98	139. 1,24,45,846	Rs, 	Rs. 6,34,091	Rs. 28,89,335	1079	Rs.	45.00
1880	25,58,96,113	2,49,53,250	1,11,05,551	4:34	1,21,93,200		5,50,406	19,41,485	1853	119 68 89 113	45.90 60.81 70.21 42.17
1881	25,75,86,095	3,20,56,823	1,61,71,097	6.34	1,21,92,200	13	18,23,748	+ 18,57,119	İ		
1883	25,75 90,499	3,53,65,201	1.80,88,150	7:02	1,24,93,200		32,05,883	+ 23,89,109	1957	158 173 172 144	45.27 42.19 51.19 60.97
1883	26,07,08,700	3,51,14,365	1,75,06,005	6.72	1,25,12,825		33,22,918	+17,00,262	1861	139	
1881	26,31,97,600	3,36,56,511	1,50,55,250	6.08	1,12,81,503		21,76,048	8,02,301	1862 1863 1864	149 175 119	78:35 62:62 67:55 72:07
1885	26,81,43,316	3,64,32,047	1,79,31,097	6.68	1,51,17,467		26,97,344	+ 1,16,586	1865	414	59 54
1886	26,92,99,673	8,92,57,907	2,08,78,390	7:75	1,60,91,158		59,59,509	+ 7,97,653	1566 1867 1868	357 368 357	\$8.07 55.69 61.80
1887	27,03,76,513	3,99,27,468	2,10,80,2.7	7 80	1,66,44,563		41,03,068	+ 3,32,601	1869	318	67-79
1889	27,25.93,961	4,10,59,219	2,16,35,667	7:94	1,72,81,176		43,31,246	+ 23,245	1870 1871 1872	800 807 284	62-25 63-98 61-25
1889	27,50,39.981	3,70,68,814	1,78,91,616	6 51	1,74,32,160		26,82,355	-22,22,700	1873	284	€ <b>7.0</b> 0
1890	27,77,29,061	3,81,15,212	1,90,22,952	6.85	1,55,23,271	•••	01,04,071	+ 3,94,710	1874	303	59·17 47·28 47·60
1891	27,75,19,781	4,52,55,833	2,32,50,703	8:08	1,67,57,263		51,50,003	F10,04,408	1677	492	48.30
1892	27,72,17,255	4,03,65,627	2,01,95,097	7:28	1,58,03,713	9	38,10,506	-21,22,723	1874	429 383 872	48.91 19.64 55.49
1893	27,72,93,860	3,53,13,742	1,79,90,922	6.10	1,91,65,618		20,22,476	-41,(0,172	1881	426	49:40
1894	27,91,00,112	3,62,71,296	1,62,42,786	5.82	2,18,32,651		30,40,331	- 86,30,196	1891	470	48.00 48.67 53.31
1895	2 <b>7,95,3</b> 9,285	3,37,90,191	1,17,16,901	5:26	2,14,97,060		16,20,061	-8e,00,520	1890	467 503	50·46 4d·49
1896	27,90,29,173	3,44,19,629	1,54,05,000	5 52	2,02,18,572		21,53,257	-60,67,063	1887	511 526	46.84 46.96
1897	27,92,85,611	2,81,32,103	93,83,654	3.36	1,89,46,479	•••	1"	- 95,62,825	1889 1890	494 508	51·42 49·80
1808	28,19,37,621	3,49,77,40G	1,41,02,053	5.00	1,83,20,513	•••	10,57,327	-50,75,787	1891	584 525	48:25
1809	28,55,49,75 <b>6</b>	3,58,09,131	1,56,57,520	5:48	1,79,65,941		17,77,002	-40,85,156	1693 . 1-91 .	£01 468	53·57 55 18
1900 { let half }	30,27,49,717	3,46,31,925	\$ 95,37,180 \$ 66,30,083	3·15 2·19	89,65,500 24,84,267	03,88,880	14.48,203	- 8,76,573 52,93,073		476	56·89 53·20
1901	80,38,67,185	4,16,57,453	2,16,48,151	7.12	48,00,908	1,90,87,970	2,72,210	26,68,937	1907 1998 1899	367 450 402	66-96 59-49 53-76
1909	80,57,71,091	4,23,12,668	2,10,73,893	6.80	49,41,692	1,90,56,785	2,92,972	-02,17,176	1 1900	439	52.49
1903	31,08,58,055	1,68,61,551	2,38,12,514	7.66	50,66,786	1,90,28,730	3,26,478	0,09,880	1901 1902 1903	518 528	48.09 50.18
1904	32,00,72,108	4,82,41,344	2,41,79,728	1	53,09,707	1,90,28,730	2,01,513	- 4,50,352	1901	575 192	49 18 49 88
1905	82,65,20,022	5,92,83,877	2,70,20,169	1	57,59,480	1,90,28,780	4,63,709	+17,68,213	1	641	48-27
1906	83,57,84,972	5,05,28,479	,	<u> </u>	61,20,668	1,90,28,730	4,70,548	-3,18,044	1 1900 .	623	49-92

<sup>·</sup> Based on actual receipts and payments during the year.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 | GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—ceneld.

Statistics of working-concid.

			WARDH	COA	I. BRAN	icit.			DH	IOND-M	ANMA	D BRA	NCH.		
			Тапі,	ī.		•	TABLE 11.			TABL.	ε I.			TABI	LE II.
. Calendar year.	Capital outlyy to end of cach year.	Gross carn- ings.	Net carnings.	Per cent, on cup-tal out-lay.	In- torest.	Gain or loss to the State	Eurn-Promgs of of exp mile to por eara	of each	Grota outnings,	Not earn- ings,	Per ceut. on enpi-tal out-	In- terest.	Gain or loss to the State.	Earn- ings per mile per week.	of * exp: to earn-
1879 4	R4, 55,99,772 57,32,931 56,80,993 69,94,186 63,93,758	0,02,879 4,75,988 5,95,622	Rs. 6,073 -1,31,730 1,12,417 28,257 5,82,382	2 (3 1/61	2,57,932 2,57,916 2,58,833		65 1523 197 104 255 763	Rs, 98,90,30s 07,07,29,227 5 9 - 19,546 6 29,2 5,146 01,00,64,755	6,85,094 6,83,862 7, 9,558	Rs. - 27,661 - 65,145 1,22,588 1,59,19, 1,92,133	0°61 1°23 1°80	4,76,299 3,93,438 3,97,802	Rs. -4,35 189 -4,11,154 -2,70,850 -2,28,640 -2,10,446	*	87:31
1581 1885 1886 1887	66,20,641 68,65,755 71,93,093 71,00,635 70,91, <b>2</b> 30	6,13,649 7,18,205 7,68,052	2,41,860 1,16,395 1,35,936 1,31,931 1,95,920	2 20 1 · · · 1 - 6	2,61,176 2,51,219 2,51,226 2,59,165 2,61,528	-1,17,924 -1,12,293	108 854 114 921 125 80	011,02,49,438 61,02,63,275 ad 02,36,745 65,09,46,9a5 141,69,75,115	9,07,423 9,54,715 9,60,390	2,00,785 2,20,62 ( 2,53,76) 2,27, 58 2,55,145	2·15 2·14 2·08	4,30,514   4,35,353   4,37,593	$\begin{vmatrix} -2,04,408 \\ -1,89,921 \\ -1,96,.89 \\ -2,10,555 \\ -1,83,018 \end{vmatrix}$		76:77   
1889 1990 1891 1892	70,54,755 70,06,181 49,81,196 49,87,689 49,87,689	9,33,326, 2,58,971 2,32,453	2,99,621 2,77,901 (6,053 34,006 89,21s	3 93 1:21 0 68	1,99,347	+ 16,777 - 6,295 -1,43,726 -1,65,744 -1,19,71	119 63 6	1 1,09 Ss,850 1 1,09 93,44- 1 10,44,639 1,19,70,02- 1,11,37,125	10,61,316 11,99,340 12,18,113	2,60,104 5,05,553 8,58,005	2:39 2:79 1:96	1,39,629 1,40,296	-1,89,592 -1,76,495 -1,31,713 -1,14,290 -95,674	:: :::	
1894	49,87,689 49,90,794 49,96,305 49,96,325 49,96,325	1,93,552 2,05,078 1,98,855	89,989 76,362 88,550 88,531 77,827	1.53	1,99,539 1,99,745 1,99,591	-1,10,215 -1,23,177 -1,15,886 -1,11,263 -1,12,026		1 13.11,642 1 1 (18 247 1 13.73,050 1,11,05,534 1,14,03,076	13.11.585	4,05,232 3,67,095 2,31,272	3·61 3·23 2·17	4,48,019 4,50,104 4,55,018 4,56,230 4,56,411	-41,871 -87,623 -1,74,958		
1809	19,96,325 } • Amulgama	1,75,380		}{	99,925		}	*	11,55,032 7,25,613 { (tod with	2,11,531	}{	2.30,200		}	

			,	кил	MGAON 1	BRANCH				Α!	MRAOTI 1	BRANCH.		
				Тавы	в Т.		TAGI	ъ II.		TABI.E	τ.		TABLE	ı 1ı.
On :	year.		Capital outlay to end of each year.	Gross cultures.	Net enruings.	Por cent. on capital outlay.	Earn- ings por antio por week.	Pro: ot exp: to caru- ings.	Capatal outlay to end of each year,	Gross carnings,	Net carnings.	Per cent, on oupital outlay.	Earnings por mile per week.	Pro: of exp: to ournings.
970			Rs. 5,35,617 5,19,888 4,99,271 4,91,164 4,00,996	Ra 38,686 27,363 41,566 75,966 62,657	Re. -266 4,922 4,561 30,389 22,469	0.94 0.92 0.19 4.58	Rs 146 91 * * 151	100°69 81°11 *	Rs. 4,77,043 4,45,585 4,45,663 4,44,651 4,44,860	Rs. 69,904 50,866 53,931 85,147 96,190	Rs. 16,175 3,689 84,124 30,535 41,387	3·39 0·82 7·72 8·89 9·88	Rs. 224 163	76·86 92·85
1884 1885 1886 1887			4,90,903 4,90,739 4,89,613 4,89,180 4,88,357	46,830 41,363 59,452 53,179 52,635	13,037 11,020 20,233 16,990 15,797	2 66 2 25 4 13 3 17 3 23	113   	72·16   	4,11,774 4,14,730 4,14,686 4,11,308 4,13,892	76,782 80,803 95,111 88,157 81,710	34,447 44,137 35,855 30,886	7:68 7:75 9:93 8:07 6:96	846  	55·49
1889 1890 1891 1892			4,90,911 4,90,520 4,90,408 4,89,102 4,87,567	65,372 55,238 66,675 65,548 21,697	22,528 26,092 32,620 30,909 21.997	4·59 5·32 6·65 6·32 4·51	••• ••• •••	 :: ::	4,45,615 4,45,155 4,49,395 4,50,160 4,49,998	1,02,023 1,01,502 1,12,900 1,05,762 48,941	41,671 46,254 53,398 48,637 43,056	9:35 10:39 11:88 10:80 9:57	 	
1894 1895 1896 1897		: .	4,86,003 5,20,947 5,22,603 5,22,150 5,22,150	21,966 26,001 24,446 13,901 24,826	21,667 26,031 24,446 18,901 24,026	4·46 5·00 4·69 2·66 4·66	  	:: /	4,49,461 4,19,988 4,51,119 4,52,445 4,54,498	42,795 39,137 43,756 30,746 40,057	41,910 \$8,253 42,871 29,862 39,172	9:32 8:50 9:50 6:60 8:62		846 972 1 440 171 808
1999 1900 1901 1902 { lst h	half	:	5,22,150 5,22,150 5,22,150	41,850 33,783 49,378 { 32,968	14,850 18,924 28,337 17,209	}	 120 120	52·71 52·35	4,54,417 4,54,418 4,51,915	33,099 78,532 1,08,578 79,582	32,214 32,486 50,837 41,099	7·09 7·14 11·12 }	 865 488	58·78 59·86
1903	•	•	Amalgams	ted with	he Great I	Indian P	eninsula	railway.	Amalgama	ted with the	Great In	dian Penir	sula railw	sy.

# History of railways Constructed and in progress. [For Index see page 112.]

Number Main head 5 (a) to (b). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (b) Agra-Delhi Chord gailway (5' 6" gauge)-

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company. Details of construction—

This railway is 125.99 miles long. Its construction was sanctioned in 1898 and it was opened in 1904.

Permanent-way. - The line is laid with 85-lb. bull-headed steel rails on 45-lb. cast iron chairs spiked with 3 spikes to deoder sleepers.

Ballast.—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

Fencing .- The Kosi-Delhi section is fenced and the Agra-Kosi section is being fenced.

Curves .- The sharpest curve is of 950 feet radius.

Gradients.—The ruling gradient is 1 in 400, except between Raja Ki Mandi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contract-

This railway is being worked under a contract (between the Scoretary of State and the Great Indian Peninsula Railway Company) which is under execution and which is to be deemed to have commenced on and from the day on which the Agra-Delhi Chord railway was opened for public traffic.

The general conditions of the contract are as follows:— Government aid.—The line is the property of the State.

Currency of contract.—The contract may during its subsistence be terminated on the 30th June or 31st December either by the Secretary of State or the Company giving to the other party not less than twelve calendar months' notice in writing.

Terms of working.—The charge for working expenses of the Agra-Delhi Chord railway bears the same proportion to its gross carnings as the entire working expenses of the Great Indian Peninsula railway "undertaking" including the Agra-Delhi chord railway bear to their combined gross earnings. The whole of the net earnings belong to Government.

Rates and fares .- The same as are in force on the Great Indian Peninsula railway undertaking.

Statistics of working-

,			TABLE	I.			Tar	ele II.
Calendar year.	Capital outlay to end of such your.	Gross osrnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1904	Rs. 1,05,91,000 1,22,46,927 1,27,90,307	Rs. 18,070 8,04,654 16,46,320	Rs. 9,992 4,19,625 8,15,363	0·09 3·43 6·37	Rs. 2,95,164 4,20,181 4,70,283	B <sub>8</sub> .  -2,85,172  -556  +3,45,080	Rs. 43 140 253	44-71 47,85 50-47

# 5 (c) Bhopal-Itarsi railway (5' 6" gauge)-

### Details of construction-

This railway is 57:39 miles long. Its construction was sanctioned in 1890 and it was opened in 1884.

Permanent-way.—The line is laid with the Indian Midland railway 80 lb. flat-footed steel rails on Indian Midland railway cast iron pot sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing .- The line is fenced throughout.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients .- The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

### Terms of contracts-

The Bhopal-Itarsi railway is worked under the following :-

Agreement of -16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, supplemental to that of 1880, for division of profits.

Contract of -21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows:-

Government aid.—The British Government have paid for the portion, 13·11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda, or in all about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend, and are applicable, to the Bhopal-Itarsi railway.

Power of Company to surrender contracts,-Nil.

The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity where the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—concld.

Terms of contracts-cancild.

Rates and fares .- The same rates and fares as are in force on the Great Indian Peninsula railway.

### Statistics of working-

						•	TABLE	i I.							TABL	E II.	
					Buopal-I	глизі (Виц	rish s <b>k</b> c	TION).		BHOPAT,	-ltarei (	NATIVE	British	State on.			
Cale	idar y	eur.		Capital ontlay to end of each year.	Gross earnings.	Net earnings.	Per ceut, on capital outlay.	In- torest.	Gain or loss to the State.	Capital outlay to ond of each year.	Gross caru- ings.	Net carn-	Per cent. on capital outlay.	Earn- ings per mile per week.	Proportion of expenses to earnings,	Eurn- ings per mile por week.	Proportion of expenses to earnings.
				Rs.	Rs.	Rs.	1	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1880 . 1881 .		:	;						9	1,21,846 15,78,157					:::		
1883 . 1883 . 1884 .	:	:	:	12,50,000 12,50,000 12,50,000	14,376 25,573 7,664	-2,704 -9,135 -1,106	0.08	50,000 50,000 50,000	-17,296 -59,185 -51,406	38,23,236	14,376 25,573 28,102	$ \begin{array}{r} 2,704 \\ -0,135 \\ -5,152 \end{array} $	0.08	70 4:3 40	81·90 135·72 104·13	Inclu Britis	dod with
1885. 1886.	•			12,50,000 12,50,000	27,425 27,622	-3,871 -3,210		50,000 50,000	-53,874 -53,210	47,71,375 48,26,036		~14,789 ~12,501		Include	d with	Great	Indian
1887 . 1888 .	•	•	•	12,50,000 12,50,000	49,227 55,117	3,950 5,340	0.31 0.13	50,000	-16,150 -14,660	48,09,939	1,85,576		0.31	Ponin	sula rail		Пицан
1869 .	:	:	:	12,50,000	79 163	-5, 122		50 000	- 55,422	13,10,816		-18,351		117	106-85	117	106-85
1890 . 1891 .				12,85,077 15,13,568	87,765 1,30,884	-16,572 18,607	3 21	50,351 57,713	- 66,923 - 9,106			56,093 1,73,154	3:46	130 200	118:88 62:50	130	118.88
1892 .	:	7	:	17,16,208	1,53,099	56,397	2.3	69,131	-12.731	50,00,000	1,17,797	1,65,958	3.32	226	63.16	199 195	62·50 62·96
1893 . 1894 .	:	:	:	20,25,058 21,71,496	1,69,162 1,61,638	52,038 61,155	2 57 2 83	78,429 83,509			3,80,217	1,30.925	2·62 2·89	248 237	69 17 61 98	185 166	69·17 61·97
1895 .				22,47,963	1,12,658	46.114	2.05						2.06	209	67:68	138	67:64
1896 . 1897 .	:	:		22,71,877 22,97,134	1,63,688 1,52,215	62,744	2.76 2.66	91,805	-30,670	50,00,000	3,31,379	11.33.096	2·77 2·66	241 223	61.75 59.84	157	61.63 59.84
1898 . 1899 .	:	:	:	23,24,365 23,61,938	1,93,364 2,09,611	79,135 84,080	3.42		13,042		1,17,010 1,47,325	1,71,375	3 13 3 59	284 307	58·81 59·89	181 194	28.50 28.50
1900 .				23,87,389	2,55,120	1,27,332	5 33		+ 32,039	50,00,000	5,35,069	2,67,288	5:35	375	56.12	234	50.08
1901. 1902.	:	:	:	25,46,891 28,02,330	2,92,861 3,46,103	1,44,235 1,71,336		1,06,632	1 64,604	50,00,000	6,37,038	3,16,683	5·77 6·33	430 508	50·75 51·51	251 278	50·64 49·74
1903 . 1904 .	:	:	:	30,92,697 31,52,907	3,77,177	1,91,143		1,17,295	+ 74,178 + 77,939	50,00,000		3,21,328 3,23,374	6.43	553 583	49·48 50·14	276 279	48.81 49.81
1905 .				31.76.930	3 25,637	1,67,305		1,23,241	+ 11 061		5,21,619	2,67,959		477	48.57	227	48.63
1906 .	•	•	•	32.57.271	3,61,617	1.78,761	5.49	1,25,079	+ 53,682	50,00,000	5.65,510	2,81.376	5 63	581	50.57	246	50-25

# 5 (d) Bhopal-Ujjain railway (5' 6" gauge)-

# Details of construction-

This railway is 113:27 miles long. Its construction was sanctioned in 1892 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.

Ballast,-The line is fully ballasted throughout with broken stone.

Fencing .- The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients .- The ruling gradient is 1 in 150.

# Terms of contracts-

The railway is worked under the following:-

Agreement of—4th August 1896 (between the Government of Her Highness the Begum of Bhopal and the Indian Midlaud Railway Company) for working the Bhopal-Parbati section.

4th August 1896 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working the Parbati-Ujjain section.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

The general conditions are as follows :--

Government aid.—Nil. The Bhopal-Parbati section is owned by the Bhopal Durbar and the Parbati-Ujjain section, by the Gwalior Durbar.

Currency of agreements.—The agreements are terminable on the expiry of ten years from the dates of the opening of the sections or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working.—For the Bhopal-Parbati section the Company retains out of the gross receipts a sum bearing the same proportion to the whole of the working expenses astributed to the Indian Midland railway system including branches as the gross receipts of the section bear to the whole gross receipts of that system including branches,

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (b)}$ . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (d) Bhopal-Ujjain railway (5' 6" gauge)-concld.

Terms of contracts-concld.

For the Parbati-Ujjain section the Company retains 50 per cent. of the gross receipts of the section of each halfyear; and receives reut for works, &c., in sole and joint use at Ujjain Junction and rent for the telegraph lines and instruments when not the property of the railway.

Rates and fares .- The same rates and fares as are in force from time to time on the Great Indian Peninsula railway. Statistics of working-

											Таньк	τ. 				TABI	E II.
				Caler	nda <b>r</b> :	year.					Capital outlay to end of each year.		Gross earnings.	Net carnings.	Per cent, on capital outlay.	Earnings per mile per week.	'Pro: of exp
												-	$\mathbf{R}_{\mathbf{s}}$	Řs,	-	Ra.	ļ
892							_				88,162	1					l
303	•	•	•	•	•		•				22,76,863	l					
94	•	•	•	•	•		Ċ				53,53,819		•••				
395	•	•	:	·	÷		÷				69,69,331		1,958	979	0.01		50.0
896 897	:	:	:	:	:		:		:		77,77,604 75,36,180 75,85,789		3,69,114 3,72,337 1,16,910	1,80,218 1,84,660 2,05,051	2°32 2°45 2°70	63 63 71	51·1 50·4 50·8
98		•		•	•	•	•	•		•	76,54,290	1	5,82,344	2,77,911	3.63	99	52.2
199 100	:	:	:	:	:	:	:	:		:	76,85,020		9,46,349	4,65,681	6.66	161	50.7
01											77,61,569 78,02,855		5,45,956 5,82,063	2,62,014 2,77,292	3:38	93 99	52·0 58·8
02		•	•	•	•	•	•	•			78,11,102	١,		2,14,241	2.86	76	49.8
03		•	٠	•	•	•	•	•	•	•	78,11,670		4,54,721	2,17,562	2.91	77	40.9
04 05	:	:	:	•	:	:		:	:	:	78,35,712		6,08,240	2,96,639	3.91	103	512
06							٠.				78.51,048		6,86,799	3,31,924	4.23	117	51.6

# 5 (e) Bina-Goona-Baran railway (5' 6" gauge)-

Details of construction-

This railway is 145.63 miles long. Its construction was sanctioned in 1892 and it was opened in 1899.

Permanent-way.-The line is laid with 75-lb. flat-footed steel rails on deodar sleepers.

Ballast .- The line is ballasted with broken stone and laterite.

Fencing .- The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients .- The ruling gradient is 1 in 125.

# Terms of contracts .-

The railway is worked under the following :-

Agreements of-15th July 1896 (between the Government of His Highness the Maharajah Scindia of Gwalior and the Indian Midland Railway Company) for working the Bina-Goona section.

12th May 1899 (between the Government of His Highness the Maharajah Scindia of Gwalior and

the Indian Midland Railway Company) for working the Goona-Dharnaoda section.

27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company) for working the Dharnaoda-Chabra section.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working the Chabra-Baran section.

Contract of 21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

Agreement of-16th March 1905 (between the Tonk and Gwalior Durbars) for purchase by the latter of the Dharnaoda-Chabra section.

The general conditions are as follows :-

Commence of the second

Government aid-Nil. The Bina-Goona, Goona-Dharnaoda and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar.

Currency of agreements. - The agreements are terminable on the expiry of ten years from the dates of the opening of the sections, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working .- For the Bina Goona section the Company retains 50 per cent. of the gross receipts of the section of each half-year; and receives rent for works, etc., in sole and joint use at Bina junction, and rent for telegraph lines and instruments when not the property of the railway.

For the Goona-Dharnaoda, Dharnaoda-Chabra and Chabra Baran sections the Company retains out of the gross receipts a sum (which includes any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same proportion to the whole of the working expenses attributed to the Indian Midland railway system as the gross receipts of each section bear to the whole gross receipts of that system. This sum not to exceed 50 per cent. of the gross receipts in the case of the Goona-Dharnaoda section.

Rates and fares. - The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Sub-heads (a) to (b) GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (e) Bina-Goona-Baran railway (5' 6" gauge) -concld.

Statistics of working-

<b></b>						_					TABLE I.				TABI	E IL
			Calendur year.								Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week,	Pro: of exp to earnings
91											R	R4.	Rs.		Rs.	
92	•	•	•	•	•	•	•	•	•	•	51,905	1	***		108.	
	•	•	•	•	•	•	•	•	•		2,57,611		•••	1	•••	***
8	•	•		•			•		•		35,18,701				•••	
14		•	•	•	•	•		•			47,79,618		•••		***	•••
)5	•	•	•	•	•	•	•	•	•	•	47,81,035	48,701	22,198		"i9	··· 54·
6 7		•		•	٠	•					51,16,074	91,140	36,821	0.68	24	
	•	•	•	•	•	•		•			87,73,621	1,02,386	43,446	0 50	29	59
8	•	•	•	•	•	•	•			. :	97,66,068	1,30,001	. 58,010	0 59	27	57
9	•	•	•							. !	99,31,680	2,67,359	1,26,108		35	55
0	٠	•	•	•	•	•	•	٠	٠	• ¦	1,00,21,605	4,31,817	2,20,490	1·27 2·20	48 57	52° 49°
1	•	•	•		•			•			1,00,43,236	2,52,716	1,22,970	1.22	33	
	•	•	•	•	•	•	•	•		• [	99,14,442	2,38,825	1,19,792	1.21	3.1	51
3	•	•	•								99,62,459	3,21,585	1,55,600	1 63	32	52.
•			•.							. '	99.87.016	3.91,886	1,92,897		42	49.
ō										. 1	99,90,394	3,68,669	1.81,269	1.98	52	49
												17,00,000	1,61,200	1.88	49	50.
,										.	99,94,053	4,91,611	9 10 001			
								-	-	- 1	22,000	2,01,011	2,40,881	2'41	65	50.

5 (f) Indian Midland railway (5' 6" gauge)-

Chairman .- Rt. Hon'ble Sir Andrew R. Scoble, K.C.S.I.

Secretary .- R. H. Walpole, Esq.

Offices .- 48, Copthall Avenue, London, E.C.

Details of construction-

The open mileage of the Indian Midland railway is 809.85 miles, which may be divided into main line (Bhopal to Agra Read), 318.59 miles, and branches, 491:26 miles.

Sanction was first given to the construction of this line in 1876 and the main line was opened throughout in 1889.

Permanent-way.—The whole of the main line, the Manikpur branch, the Camppore branch from Jhansi to mile 326 64, and from Bina to Katni, are laid with 80-lh. flat-footed steel rails on east iron pot sleepers. The Cawnpore branch from mile 331 64 to Hamirpur Read is laid with East Indian railway 75-lb, double-headed steel rails on Denham Olpherts' sleepers. The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80-lb. flat-footed steel rails and cast iron oval pots.

Ballast .- The line is ballasted with gravel, laterite, kunkur or stone.

Fencing .- The main line is fenced throughout and the branches are partially fenced.

Curves .- There are no curves with a radius of less than 990 feet.

Gradients .- The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur I in 125. The Jhansi-Cawopore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhmau where it is 1 in 200. Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -2nd October 1885-Indian Midland Railway Company's principal contract.

18th March 1890-Contract for the acquisition of the Scindia railway.

18th June 1896-Contract for the Sauger-Katni railway.

21st December 1900 - Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government and .- Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required the guarantee to be 4 per cent, or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system; and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was provided free.

Currency of contracts-(1) Indian Midland railway contract.—The contract of 1885 may be determined by Government giving 12 months' previous notice on the 31st December 1910, or on the 31st December of any succeeding tenth year.

Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations, or if the line be worked at a loss for not less than three consecutive half-years. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900; but the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits remains in full force till the termination of either the contract of 1885 or that of 1900.

(2) Scindia and Saugor-Kaini railways contracts. - The contracts of 1890 and 1896 run concurrently with that of 1886, to which they are supplemental,

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 5 Sub-heads (a) to (h). GREAT INDIAN PENINSULA BAILWAY SYSTEM—contd.

5 (f) Indian Midland railway (5' 6" gauge)-concld.

Terms of contracts-concld.

Power of Company to surrender contract .- Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses, and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

### Statistics of working-

								TA	BLE I.					TABL	e II.	
	Cal	ondai	. year			Capital outlay	Gross	Not	Per cent.		Com-	Gain or loss	Scin	ID <b>IA.</b>	Indian	MIDLAND.
					to end of oach year.	oarnings.	earnings.	on capital outlay.	Interest.	share of net earnings.	to the State.	Earnings per mile per week,	Pro: of exp: to carnings.	Earnings per mile per week.	Pro: of exp: to	
1050						Rs.	Rs.	Rs.		Rq.	R.	Rs.	Rн.		Rs.	
1878 1879	:	:	:	:	:	73,22,551	90,916	-33,772		3,06,178		-3,39,950	54 39	133·30 134·95	:::	:::
1880 1881		:	:	:	:	81,63,253 38,16,663	2,01,923 3,01,681	20,129 75,319	0-25 0-91	3,57,620 3,48,809		-3,37,491 -2,70,467	58 81	88:05 77:85		:::
1882 1883	:	:	:	:	:	87,63,714 92,92,537	3,29,299 3,38,511	92,231 1,59,716	1.05 1.72	3,47,303 3,56,750	:::	-2,55,072 -1,97,034	85 87	71.90 52.82		
1884 1885	:	:	:	:	:	1,1°,68,111 1,60,14,107	3,68,326 3,94,081	1,72,603 1,99,680	1·15 1·24	8,74,122 6,48,112	!	-2,01,519 -4,48,432	95 101	53·14 49·33		:::
1886 1887	:	:	:	:		2,48,06,299 5,10,96,457	3,91,832 6,32,204	2,14,526 2,78,043	0.86 0.24	18,69,268 20,00,181		-16,51,742 $-17,22,141$	101 117	49·69 46·62	56 81	82:03 80:63
1888 1889	:	:	:	:	:	6,96,63,213 7,81,45,085	10,27,638 30,69,255	3,74,204 6,83,111	0.54 0.81	28,55,488 31,24,456		-24,81,284 -24,91,345	95	47.74	<b>9</b> 9 92	72·53 77·32
1890 1891	:	:	:	:		8,32,79,427 8,52,46,148	31,24,36 <b>5</b> 41,62,361	5,99,780 18,52,172	0·72 1·59	33,94,15 <b>7</b> 33,12,200		- 27,94,377 - 19,60,028	••• •••		86 115	80·80 67·51
1892 1893	:	:	:	:	:	8,65,79,006 8,71,62,843	44,77,625 44,59,053	17,26,260 17,00,109	1·95 1·95	37,23,985 41,40,194	:::	-19,97,725 -24,39,785			124 123	61·45 61·87
1894 1895	:	:	:	:	:	8,78,06,437 8,81,49,985	52,22,033 44,91,707	22,02,384 16,48,360	2·51 1 87	42,59,815 45,97,495		-20,57,481 -29,49,135	 	***	144 124	57·88 63·30
1896 1897	:	:	:	:	:	9,25,53,896 9,77,91,421	48,51,951 54,89,540	20,17,920 24,06,565	2·18 2·46	44,23,983 42,53,893		-24,06,154 -18,47,328		Ť	134 150	59°41 56°16
1898 1899	•	•	:	:	:	9,96,74,805 10,16,31,077	56,25,823 61,77,226	25,11,911 27,82,950	2·52 2·71	39,99,986 39,75,411		14,88,075 11,92,461		•••	147 152	55·35 57·08
1000 1901	:	:		:	:	10,31,35,002 10,58,27,081	90,60,560 82,13,068	48,72,287 42,50,587	4·72 1·03	40,03,595 38,63,725	1,88,164	+ 8,68,692 + 1,98,698		•••	213 199	46:23 48:43
1902 1 <b>90</b> 3		:	•	:	i	10,62,11,714 10,08,96,302	90,49,628 80,86,118	44,86,267 40,92,942	4·22 3·73	41,04,505 41,85,502	7,330 2,062	+ 3,74,432 - 94,622		***	209 180	50·48 49·35
1904 1905		:	:	:	:	11,22,35,779 11,31,43,178	82,90,712 79,91,323	41,48,862 40,81,528	3·70 3·61	42,59,767 42,77,173		-1,10.905 -1,92,645			183 178	19·96 48·89
1906	<u> </u>	<u>.</u>	<u>.</u>	<u>.</u>		11,41,69,155	98,69,294	49,19,560	4:31	42,96,288		+6.23,277		)	234	50-15

# 5 (g) Gwalior Light railway (2' 0" gauge)-

### Details of construction-

The open mileage of this railway is 183:53 miles, and may be divided into the following sections:—(1) Gwalior to Sipri, 73:81 miles, (2) Gwalior to Bhind, 52:33 miles, and (3) Gwalior to Sabalgurh, 57:39 miles. The several sections were opened in 1899 and 1904, respectively.

Besides the above there are 66.39 miles under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sal and steel trough sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing .- The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Gradients.-The ruling gradient is 1 in 60.

# Terms of contract-

The railway is worked under the following agreement :-

Agreement of —11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalier and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows :-

Government aid .- Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract. - Rither party may determine the agreement by giving three months' notice.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 5 to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—concld.

(5) (g) Gwalior Light railway (2' 0" gauge)—concld. Terms of contract-concld.

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed, and all other expenses connected therewith, and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal, plus 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares. - Rates and fares are the same as those in force on the Great Indian Peninsula railway.

#### Statistics of working-

												Тат	BLE I.		TABI.	r II.
			•	Calon	dar 3	, year.					Capital outlay to end of pach year.	Gross carnings,	Not. carnings,	Per cont. on capital outlay.	Farnings per mile per week.	Proportion of expenses to earnings.
					,		-		•		<b>Ъ</b> .	R.	R4.		Rs.	
89 <b>6</b> 897	:	:	:	:	•	:	:	:	:		2,166 1,03,553		•••			
808		•									9,30,815		•••			
900 900	:	:	:	:	:	:	:		:		22,79,267 27,10,557	4,094 84,617	-4,113 -137	:::	6 13	258:35 100:16
901			-								31,07,277	82,227	520		13	100.6
)02 )03	•	•	•	•	•	•	•	•	•		39,77,104	1,09,577	9,346	0.33	· 17	91 43
04	•	•	•	•	•	•	•	•	•	•	41,76,953 46 G (993	1,66,002 1,83,284	68,216	1.63	25	58 9
05	:	:	:	:	:	·	:	:	÷	:	54,72847	1,89,705	52,501 52,745	1·18 1·18	22 20	71·9 72•2
90											57,87,428	2,58,223	1.12,211	1.94	27	56.5

#### 5 (A) Matheran Light railway (2' 0" gauge)-

#### Details of construction -

The line, from Neral station on the Great Indian Peninsula railway to the hill station of Matheran, will be 12.61 miles long.

Its construction by Mr. Abdul Husein Adamjee Peerbhoy of Bombay has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

#### Terms of contract-

This railway will be maintained and worked under-

Terms—Contained in the order accompanying Bombay Government Notification No. 34, dated the 28th July 1904. The general conditions are as follows:—

Government aid .- Free provision of Government land.

Currency of agreement.—Government may purchase the undertaking as a going concern from the promoter on 1st January 1940, or at the expiration of any subsequent period of 5 years, at 25 times the average net earnings of the undertaking for the 3 calendar years immediately preceding the date of purchase.

Terms of working .- Not yet settled. .

Rates and fares .- Certain maxima have been fixed.

Number Main head 6 Sub-heads (a) to (i).

# MADRAS RAILWAY SYSTEM-

Chairman.-Lieutenant-Colonel R. Gardiner, R.E.

Secretary .- W. H. Cole. Esq., M.I.C.E.,

Offices. -1, Broad Street Place, Finsbury Circus, London, E. C.

Lines comprising the system.—The Madras railway system is made up of-

							Open line.	Under construction or sanctioned for construction.	Total.
							Miles.	Miles,	Miles.
(a) Madras railway					(5' 6" gange) .		904.01	1 00	905.01
(b) Azhikal-Mangalore extension .				•	(5' 6" gange) .		56.85	20:91	77.26
					(5' 6" gauge) .		9*88	•••	9.88
(d) Madras (North-East line) (Souther	n s	ection of	tho	East	(5' 6" gauge) .		497:19	0.85	49R-04
Coast (State) railway)								•	
(e) Nilgiri railway					(3° 3}" gauge) .		16:99	11.75	28.74
(f) Shoraunr-Cochin railway			_		(3' 34" gauge)	_	64.75		64.75
(g) Morappur-Dharmapuri railway		•	•	•	(2' 6" gango) .	•	18:58	***	
(1) Minnestine Palabas aini mailasan	•		•	•		•		***	18.28
	•		•	•		•	25.38	•••	25.38
(i) Salem-Attur railway	٠		•	•	(5' 6" gauge) .	•	***	36 06	86.06
							-	•	******
					Total		1,593.08	70.57	L668-65
									4-14-14

# History of railways constructed and in progress. [For Index see page 112.]

Number Main bead 6 Sub-heads (a) to (i) . MADRAS RAILWAY SYSTEM—cont.d.

#### Running powers-

Foreign lines over Home line—

Beneal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)
Southern Mahratha railway, Tudepalli to Bezwada .

Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station

Total

8:83

# 6 (a) Madras railway proper (5' 6" gauge)—

#### Details of construction-

The open mileage of the Madras railway proper amounts to 90 b 01 miles. This may be divided into (1) the South-West line, main line (Madras to Azhikal), 472.73 miles; branches, 123 miles: and (2) the North-West line (Arkonam to Raichur), 308-23 miles. Of the above 43.13 miles are double line.

There was, in addition, 1 mile under construction.

Sanction was first given to the construction of the South-West line in 1853 and it was opened through to Calicut in 1888. The North-West line was sanctioned in 1859 and was opened through to Raichur in 1871.

Permanent-way.—The present type of permanent-way for the main line is 80-lb. bull-headed steel rails, laid on cast iron pots, each weighing 112 lbs. The section, Calicut to Azhikal, is laid with 60-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves .- The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghat where it is 1 in 70 and at Walayar Ghat where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghat where it is 1 in 66); between Podanur and Mettupalaiyam, 1 in 50; between Olavakkot and Palghat, 1 in 106; between Walajah Road and Ranipet, 1 in 150; and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 66).

#### Terms of contracts-

La Company Comment

The Madras railway is worked under the following contracts:-

Contracts of -22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

The general conditions of the contracts are as follows:-

Government aid.—Guarantee of interest in sterling at 5 per cont. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land was provided free of cost.

Currency of contracts.—In ninety-nine years from 1st April 1857 the line reverts to Government on paying for the rolling-stock at its fair value, provided the Company does not previously give notice of its intention to surrender the contract. Government may, within six months after the expiration of 25 or 50 years of the term, determine the contract by purchase at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations, Government repaying the capital expended.

Nors.—Government relinquished their right to determine the contract at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1907 within six mentus after 1st April.

Power of Company to surrender contract.—The Company may, at any time, surrender on six months' notice, receiving back (either in cash or by annuity at the option of the Government) the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1971, after deducting the working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work', subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1s. 10d. per rupee, are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901 the covenants and provisions of the several principal indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract Government fixed maxima rates and fares, which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 6 . MADRAS BAILWAY SYSTEM—contd.

6 (a) Madras railway proper (5' 6" gauge)-concld.

Statistics of working-

						1			'LA	BLE I.	,				TABLE	u.
<b>,</b>	·c	alos	d.r	year			Capital outlay to end of each year.	Отона епт <b>і</b> п <b>д</b> я	Net earnings.	Per cent. on capital outlay.	Gnarantoed interest (at current rates of exchange).	Cour- plany's share of net earnings.	Gain or loss to the State.	Calon- dar year.	Earn- ings por milo per week.	Proportion of expense to carnings.
						-	Bs.	Rs.	Rs.		Rs.	Rs.	Ra.	1856	Re. 75	51.66
1879 .				•		.	11,45,68,493	66,26,186	20,75,170	1.81	57,04,205		36,29,035	1857 1858	91 98	47 13 55 53 60 35
1880 .						.	11,39,78,220	61,62,*16	19,57,137	1.73	£7,16,332		-37,59,195	1859	122	60:35
1881 .						.	11,40,07,803	63.11,312	20,75,856	1.82	57,16,365		-36,40,509	1860 1861	317 91	78·50
1882 .		•	•				11,39,69,608	69,18,571	25,70,811	2 25	56,89,011		-31,18,170	1862 1863	84 110	74·02 68·5
1662 . 1683 .		•	•	•	·		11,39,92,074	66,31,909	25,26,519	2-32	57,08,416		-31,81,867	1864 1865	183 145	49-65 45-6
		•	•	•	•	•	11,12,51,161	71,11,315	20,35,697	2.57	61,23,432		-34,87,745	1866 1867	147 153	45·6 43·4
1884 .		••	•	•	•	.	11,50,33,160	76,57,993	32,79,168	285	67,38,206		-31,57,039	1868 1869	181 171	43:4 41:4 49:1
1885 .		•	•	•	•	•	•	•	32,19,213	2.78	71,24,952	1	-38,95,700	1870 1871	116	59.8 51.2
1866 .	•	•	•	٠	•		11,59,81,297	79,66,097		1				1872	143	52·1 56·9
1887 .	•	•	•	•	٠		11,40.70 190	81,72,135	29,80,020	2 52	73,20,207	"	-44,10,178	1873 1874	157 132	64.6
1888 .			•	•	•		11,53,78,656	85,31,054	35,21,615	3 05	76,23,851		-41,02,236	1875 1876	144 159	70·2
1889					•		11,63,54,695	91,10,894	37,38,421	3.51	76,69,931		-39,31,513	1877 1878	225 118	59·2
1690 .							11,79,84,234	95,06,131	45,21,140	2 83	68,85,958		~ 23,64,478	1979 1880	148 138	68.6
1891 .							11,89,52,009	93,11,6%	39,06,529	3.58	73,92,186		-34,85,657	1881 1882	141 155	62.8
1892 .							11,97,71,885	96,21 670	12.92,133	3 .8	83,62,369		-40,70,236	1853 1884	148	61.0
1893							12,03,89,499	1,05,05,036	54 21,742	4.50	94,5" 732		30,60,990	1885	171	58.6 57.1
1894		•	Ī				12,05,25,315	1,03,21,012	49,47,863	4 10	96,56,469		-47,08,606	184 <b>6</b> 1887	178 189	59° 64° 58°
		•	•	•	-		12,05,91,797	1,12,05,407	58,10.310	4 80	96,17.435	53,195	-38,60,320	1888 188 <b>9</b>	195	1 58.9
1895		•	•	•	•	•	12,11,52,001		53,85,291	4.44	89,92,681		-36,07,393	1890 1891	218 214	58.2
1896		•	•	•	•	•	12,15,01,808	1,14,65,314	59,82,565	4.92	81,81,597	91,135	-25,90,167	1892 1893	221 241	58·2 55·4 48·3
1897		•	•	•	•	•	ł	, , ,	51,72,657	4.43	82,40,191	90,516	29,18,090	1894 1895	237 257	52·0 47·1
1898	•	•	•	•	•	•		1,07,20,453		1	1			1898 1897	249 268	\$0.3
1899	•	•	•	•	•	•	12,31,93,025		50,16,254		80,58,144		-30,41,890	1698	246	47.6
1900		•	٠.	•	•	•	12,62,83,369	1,13,39,222	53,70,820	1	81,24,701		-27,53,881	1699 1900	240 254	52.4 51.7
1901		•	٠.	•	•	•	13,13 51,379	1,14,86,803	57,55,603	1	83,15,733		-25,30,130	1901 1902	253 256 261	51. 49. 50. 55.
1902							13,50,23,683	1,19,41,074	57,91,420	4.29	84,41,464		-26,50,044	1903 1904	261 298	1 54.4
1908							13,61,05,517	1,26,21,022	55,67,861	4.08	84,39,831		-28,71,967	1905 1906	296 321	57·1
1904							13,71,10,600	1,37,65,0€4	62,73,135	4.57	86,30,058		-23,56,923	,,,,,	051	""
1905							13,85,08,336	1,09,16,956	58,69,047	4.24	87,03,239		-28,31,192	i		
1906 .		•	·				14,03,39,676	1,50,91,141	61,79,289	4:40	87,71,265	1,25,000	-27,17,976			1

6 (b) Azhikal-Mangalore extension (5' 6" gauge) -

Details of construction-

The open mileage (Azhikal to Kumbla) is 50 35 miles. It was sanctioned in 1901 and was opened in 1906. There are 20.91 miles (Kumbla to Mangalore) still under construction.

Permanent-way. - The permanent-way consists of 75-lb flat-footed steel rails laid on pyinkado, sal and jarrah sleepers. Ballast .- The line is ballasted with laterite broken to 2 " gauge in cuttings and sand with laterite covering in banks.

Fencing .- The line is fenced throughout.

Curves .- The sharpest curve is of 2,865 feet radius.

Gradients .- The ruling gradient is 1 in 90.

Terms of contract-

The line is worked under the following contract :-

Contract of-30th December 1903 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working—supplemental to the contract of 31st December 1902, for working a portion of the late East Coast (State) railway.

The general conditions of the contract are as follows :-

Government aid .- The line is the property of the State.

Currency of contract.—The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i). MADRAS BAILWAY SYSTEM—contd.

6 (b) Azhikal-Mangalore extension (5' 6" gauge) - concld.

Terms of contract-concld.

in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters;"

and the share of general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the state railway.

The balance of the gross earnings to belong to Government.

Rates and fares. -Government exercise full control over rates and fares.

Statistics of working-

*		T	ABLE I.				TA	al <b>e II.</b>
Calendar year.	Capital out- lay to end of the year.	Gross earnings.	Net carnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Re.	Rs.		Rs.	• Rs.	Ba.	
1906	1,20,19,658	30,310	14,990	0.13	4,17,122	-4,02,132	93	50.54

#### 6 (c) Kolar Gold-fields railway (5' 6" gauge)-

The railway was constructed by the Mysore State in order to provide facilities for the gold-fields.

Details of construction -

The railway is 9.88 miles long and connects Bowringpet with Marikuppam. Its construction was sanctioned in 1892 and it was opened in 1894.

Permanent-way.-The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

#### Terms of contract-

The railway is worked under the following agreement :-

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows :-

Government aid .- The line is the property of the Mysorc State.

Currency of agreement.—The agreement to remain in force subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system, including this line, bear to the gross earnings of that system, and 5 percent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working-

												TAB	LE I.		ir.		TAB	Le il
,	`				Q	lond	ar y	ear,			*		Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earning
892 893 894	•	:	•	•	:	•	•	:	:	:	•		Rs, 27,661 5,27,634 6,56,175	Rs.  75,771	Rs.  29,273	4.46	Ba. :≈ 240	61-87
895 896 897 898	•	•	•	•	:	•	•	•		•	***		6,61,654 7,45,004 7,91,074	1,52,953 1,55,817	66,879 63,287	10·03 8·50	294 299	56-60 59-25
198 199 100	:		:	:	:	:	:		:	:	:	:	8,09,537 10,79,552 10,77,901	2,08,854 2,04,002 1,77,667 2,08,892	90,278 82,133 56,827 67,093	11 41 10 15 5 27 6 22	402 392 342 402	56*77 49:8: 68:0:
01 02 03	:	:		:	•	:	•	:	:	:	:	:	11,20,230 11,38,480 11,62,504 11,73,128	2,17,661 2,16,629 2,07,257 2,44,744	91,877 84,864 75,237 89,890 67,600	8°20 7°45 6°47	421 422 403	\$7·7: 60:8:
04 06 08	•	:	•	;	:	:	•	•	:	:	:	:	11,73,128 11,87,864 11,96,520	2,44,744 1,88,402 2,00,400	89,230 67,600 68,275	7.61 5.69 5.71	476 867 690	67-7 68-5 64-1

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sab-heads (a) to (i) . MADRAS RAILWAY SYSTEM—contd.

6 (d) Madras (North-East line) railway (5' 6" gauge)—

Details of construction-

The North-East line, which is the southern portion of the old East Coast State railway, is 497 19 miles long. It consists of 485 26 miles of main line (Washermenpet to Waltair) and 11 93 miles of branches.

Its construction was sanctioned in 1890 and it was opened throughout in 1900.

The line from Korukkupettai to Basin Bridge Junction, 0.85 mile was under construction.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on wooden and poa-pod steel sleepers.

The wooden sleepers are gradually being renewed by east iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced only in the vicinity of towns, stations and level crossings.

Curves. There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair 1 in 150.

#### Terms of contract-

The line is worked under the following contract:-

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows :-

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is for any reason terminated under the provisions thereof prior to the expiry of the term of this contract, the latter also will, ipso facto, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April of any year subsequent to 1904.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised, by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross carnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every inite of line open to traffic for Government supervision and control; and the following:—

the actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way,"
"Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters"
the share of the general working expenses of the system under the remaining heads of account in proportion to
the gross earnings of the State railway;

the allowances and interest payable under the contract for the uso by the State vailway of the Company's terminal station at Madras;

and the expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders;

The balance of the gross carnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require, at six months' notice, the re-transfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

						T.A	BLE I.				TABI	E IL	
Ca	lend	der j	ear.		Capital outlay to end of each year.	Gross earnings.	. Net carnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State,	Farnings per mile per week.	Proportion of expenses to earnings.	Remarks.
890	•	•	•		Rs. 3,79,490	Rs.	Re.		Ba. / 7,590	Rs7,590	Rs. 		The figures prior to 1901 relate to the whole of the East Coast (State) rail-
1891 1892 1898 1894 1895	:		:	:	1,10,69,894 2,60,11,131 8,58,67,473 4,39,47,727 5,09,41,876	4,98,660 14,80,678 19,04,251	 1,53,792 1,50,921 9,29,184	 0.43 0.84 0.65	2,33,786 7,41,621 13,48,868 15,92,909 19,12,886	-2,33,786 -7,41,621 -11,95,136 -14,41,988 -15,83,702	 68 98 90	 84·69 89·81 82·71	way.
1896 1897 1898 1899		:	:	:	6,38,64,948 7,22,26,070 8,24,02,269 8,65,93,097 8,80,71,781	24,66,573 29,21,162 28,10,742 43,92,237 64,04,543	5,39,901 8,92,453 6,69,891 15,37,294 26,54,794	0.85 1.23 0.81 1.78 3.01	23,72,875 26,96,796 30,98,828 35,14,602 34,46,555	-18,32,974 -18,04,343 -24,28,997 -19,77,808 -7,91,761	94 100 94 104 148	77-98 69-59 76-46 65-11 56-10	_
1901 1908 1908 1904 1905	:	:	:	:	6,07,27,275 6,16,89,605 6,33,83,510 6,43,95,889 6,50,38,641	45,68,155 45,46,551 45,18,656 50,48,367 67,36,215	20,31,210 16,19,128 15,53,837 15,61,875 26,65,781	3·84 2·62 2·45 9·48 4·10	24,51,072 24,46,187 24,82,162 25,44,580 25,77,504	-4,19,862 -8,27,059 -9,28,825 -9,82,705 +88,277	176 177 176 196 262	65-62 64-39 65-62 69-08 60-48	
1906				•	6,57,16,083	60,68,407	24,19,766	8-68	26,07,849	-1,87,583	236	60-18	

# History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) to (i) MADRAS RAILWAY SYSTEM -contd.

## 6 (e) Nilgiri railway (3' 3%" gauge)-

The old Nilgiri Railway Company was registered on the 30th September 1835 with a nominal capital of Rs. 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894, and a new Company was formed in February 1896 to purchase the line from the old Company and supply the capital required to complete it, and to construct the proposed extension to Cotacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the let January 1908.

#### Details of construction-

The open mileage of this railway is 16.99 miles. The line connects Mettupalaiyam with Coonoor. It was sanctioned in 1892 and was opened in 1899.

Besides the above there are under construction 11.75 miles, viz., from Coonoor to Octacamund.

Permanent-way. - The permanent-way consists of flat-footed steel rails, 50-lb. to the yard, laid on pyinkado eleepers. Between Kallar and Coonoor there is also a central rack rail with channel bars.

Ballast.-The line is ballasted with clean broken granite.

Fencing.—The line is fenced throughout.

Curves .- The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12.5.

#### Terms of contract-

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903)-

Government aid.—The line is the property of the State.

Currency of agreement— The agreement may be terminated at any time on six months' notice from either Power to determine agreement— party.

Terms of working.-The Nilgiri railway to pay actual outlay on engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working the Madras railway to receive 25 per cent. of gross earnings, plus 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

#### Statistics of working-

						TAB	LM I.					TARI	n II.
Calen	dar ye	ar.	Capital outlay to end of each year.	Orosa earnings.	Net carnings.	Per cent. on capital outlay.	Subsidy from Govern- ment,	Total income.	Percentage *of total income on capital . outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
			Rs.	Bs.	Re.		Rs.	Rs.		Ra.	Rs.	Rs.	,
1890			67,850	•••									
1801 1892 1893 1694 1895 1896 1897 1898 1899 1900			2,89,134 8,89,751 15,50,000 18,50,000 22,60,000 18,92,610 36,84,977 44,54,085 47,19,944 48,96,490	     84,448 1,76,032	    20,209 86,642	     0.42 1.77	     24,392 23,006	    44,601 1,09,648	    0.93 2.24			      175	76·06
1901 1908 1903 1904 1905	:		48,74,254 49,08,431 35,24,265 35,84,423 43,96,192 50,08,547	2,41,386 3,09,063 2,74,905 2,90,129 8,15,492 3,20,242	1,37,893 1,12,111 73,998 66,162 48,972	2·83 2·28 2·10 1·85 1·12	···	1,37,883 1,12,111 78,988 66,152 48,972 37,202	2·83 2·28 2·10 1·85 1·12	1,65,497 1,33,384 1,35,878 1,38,327	-91,509 -67,222 -86,906 -1,01,125	975 359 511 328 357 362	42:87 63:78 78:09 77:20 84:48 88:88

# 6 (f) Shoranur-Cochin railway (3' 33" gauge)-

# Details of construction-

The railway is 64.75 miles long and connects Shoranur with Ernakulam. It was sanctioned in 1899 and opened in 1902.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted throughout with stone and sand, chiefly the former.

Fencing .- The line is fenced in the vicinity of towns, stations and level crossings.

Curves .- The sharpest curve is of 818 57 feet radius.

Gradients.-The ruling gradient is 1 in 80.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 6 Sub-heads (a) to (i) . MADRAS RAILWAY SYSTEM—contd.

6 1f) Shorannr-Cochin railway (3' 3}" gauge) -concld.

#### Terms of contract-

The Shoranur-Cochin railway is worked under the following agreement:-

Agreement of -lst January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:-

Government aid .- The line is the property of the Cochin State.

Currency of agreement.—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing, from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent, per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

#### Statistics of working-

				w				6		T	A BI	LE I.				TABL	a II.
,				Cale	ndar	year.	,					Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent, ou capital outlay.	Farnings per mile per woek.	Proportion of expenses to earnings.
			•									Rs.	Rs.	Rs.	,	Rs.	
1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	53,921 80,927 28,47,394	 	 	•••	 	••• •••
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:		50,82,280 63,66,301 64,41,390 67,88,610 68,30,214	1,34,845 3,52,964 3,92,782 3,86,945	73,299 1,98,023 1,94,244 1,61,395	1·15 3·07 2·86 2·36	 69 105 117 115	45:64 43:90 50:55 58:29
1906		•							٠.		•	68,59,349	3,91,378	1,55,689	2.27	116	60-22

#### 6 (g) Morappur-Dharmapuri railway (2' 6" gauge)— Details of construction—

The railway is 18:53 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1906.

\*\*Permanent way.\*\*—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted with stone in cuttings and in banks with moorum with stone covering broken to 2" gauge. Fencing.—The line is unfenced.

Curves .- The sharpest curve is of 955 feet radius.

Gradients .- The ruling gradient is 1 in 67.

#### Terms of contract-

The line is worked under the following contract :-

Contract of -4th October 1904 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the State.

Currency of contract .- The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of open line for Government supervision and control'; the Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line hear to the gross earnings of that system, provided that such share shall in no case be less than an average sum of Rs. 35 per mile per week. The balance of the gross earnings to belong to Government.

Rates and fares. - Government exercise full control over rates and fares.

#### Statistics of working-

			TAR	ole I.			TABI	a II.
Calendar year.	Capital outlay to end of the year.	Gross carnings.	Net earnings.	Per cent, on espital outlay.	Interest.	Gain or loss to the State.	Earnings por mile per week.	Proportion of expenses to excuings.
1906	Rs. 8,96,836	Rs. 82,702	Ra. -431	•••	<b>B</b> a. 30,280	Ra. 30,711	Ra. 87	101-32

# History of railways constructed and in progress.

[For Index see page 112.]

Number main head 6 Sub-heads (a) to (i). MADRAS RAILWAY SYSTEM—concid.

6 (h) Tirupattur-Krishnagiri railway (2'6" gauge)-

Details of construction-

The railway is 25.38 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak. Ballast .- The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge.

Fencing.—The line is unfenced.
Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Terms of contract-

The line is the property of the State and is worked under the same contract and on the same terms and conditions as apply to the Morappur-Dharmapuri railway [6 (g)].

Statistics of working-

***********					, A			Table	s I,				TAR	LR II.
	Calendar year. outlay end coach ye						Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.		Gain or loss to the State,	Earnings per mile per week.	Proportion of expenses to carnings.
1905							Bs. 10,63,690 10,78,762	Rs. 12,8 <b>40</b> 46,276	Rs. 1,067 1,825		Rs. 18,802 39,194	Rs. 19,869 41,019	Ra. 34 35	108·81 108·94

### 6 (i) Salem-Attur railway (5' 6" gauge)-

Details of construction-

The railway will be 36.06 miles long. It was sanctioned in 1903 as a famine feeder line; but the commencement of work has not yet been authorised.

Main head 7 -- NAGDA-MUTTRA RAILWAY (5' 6" gauge)— Number Sub-head (a)

Details of construction-

This line which is under construction by the State, will be 380 50 miles long, viz., (1) main line, Nagda to Mattra 340.50 miles, and, (2), Baran branch, Kotah to Baran, 40 miles.

The construction of the main line was sanctioned in 1905 and the Baran branch in 1906.

Number Sub-heads (a) to (c)

#### NIZAM'S GUARANTEED STATE RAILWAY SYSTEM-

Chairman-Charles Albert Winter, Esq.

Secretary-II. Rendel, Esq.

Offices-Winchester House, 50, Old Broad Street, London, E. C.

Lines comprising the system.—The Nizam's Quaranteed State railway system is made up of-

					•							Open line. Miles.
												390.13
•		•			•							20.58
•	•	•	•	•	•	•	•	•	•	•	•	391.13
									To	tai		741.84
(No	th-E	aat li	(10) f	for no	agon	CEAR O	nd ee	vođa i	traine			1:01
	•	•	• • .	• •	• • • • •	• • • • •	• • • • • •			To	Total  (North-East liae), for passenger and goods trains.	

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rollingstock. From January 1879 to the 31st December 1884 it was worked by State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast (State) railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast (State) railway. It was transferred back to the Company for working from the 1st January 1901.

# 8'(a) Nizam's Guaranteed State railway proper (5' 6" gauge)-

Running Home lin

Details of construction—
The open mileage of the Nizam's Guaranteed State railway proper is 330-13 miles, which may be divided into main line (Wadi junction to the British frontier), 310-10 miles, and branches, 20-03 miles. Its construction was first sanctioned in 1871 and it was opened through in 1889.

Permanent-way.—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails on cast iron pot sleepers the following 9 miles with 68-lb. double-headed steel rails on cast iron pot sleepers. The remainder of the line is laid with 661-lb. flat-footed steel rails on steel pea-pod sleepers, with the exception of the mixed (5' 6" and 3' 38") gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail

Ballast .- The line is ballasted throughout with stone and sand.

-The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station-Fencing .yards are fenced.

Curves .- The sharpest curve is of 1,300 feet radius.

Gradients. -- The ruling gradient is 1 in 100.

Terms of contract-

The railway is worked under the following:—

Contract of -27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

Letter No. 257 of -7th March 1903 from the Nizam's Government to the Railway Company as to rates and fares.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 8 Sub-heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd,

8 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—concld.

Terms of contract-concid.

The general conditions are as follows:-

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge:

Note.—The guarantee of His Highness the Nizam's Government on the share capital of £2 900,000 and £984,640 four per cent, debontures expired.

Currency of contract .- The contract is current for a period of 99 years. On expiry by effluxion of time the and, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working. - From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the sumuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance one-half will be paid to the Nizam's Gov-

ernment, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be higher than those adopted in 1883, except with the previous assent of the Nizam's Government.

Statistics of working-

				 	 TAB	1.E	ſ. 				(Includes Be	
÷	Cul	endar y	ear.				Capital outlay to ond of each year.	Gross earnings.	Not carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
170							Ra. 1,16,46,997 1,21,90,897 1,22,85,291 1,22,87,794 1,22,83,560 1,23,08,720 2,04,60,998 2,71,49,342 2,69,71,143 3,55,11,554 3,59,46,922 3,77,11,194 3,95,18,395	Rs. 6,94,401 7,02,716 7,76,834 8,53,418 8,53,521 9,72,917 11,13,950 13,81,077 15,478,91 17,76,075 22,57,462 25,07,268 27,76,437 27,80,642	Rs. 89,925 2,43,604 2,48,606 3,75,009 2,37,932 4,70,927 4,57,024 6,04,524 5,52,905 7,57,407 7,72,513 10,39,500 12,57,860 13,24,559 14,36,451	0.77 2.04 2.35 5.07 1.94 2.87 2.86 2.15 2.15 2.15 2.16 3.19 3.19 3.35	Rs. 110 112 120 141 137 155 178 143 143 143 143 143 118 118 119 140 151 161	87-0 68-0 61-3 56-3 72-1: 63-0 56-2 49-7: 64-3 57-3: 66-9-59-7: 54-7 53-3
998					 :		4,01,96,909 4,02,33,826 5,06,43,818 4,05,24,737 4,09,60,944 4,10,54,149 4,17,49,124 4,24,30,543 4,28,89,527 4,30,13,663 4,32,66,412	30,61,605 32,56,885 32,15,542 33,03,522 36,10,354 34,07,612 41,10,201 49,12,056 40,77,927 44,06,494 43,18,630	14,36,451 16,22,028 15,77,140 17,28,196 19,38,769 22,74,580 25,01,046 28,41,985 26,48,120 26,82,533 25,08,386	3·57 4·03 3·85 4·24 4·73 5·54 6·02 6·81 6·25 5·90 6·45	136 177 185 187 205 221 240 286 236 254 251 252	58:6 50:2 53:7 50:0 48:6 44:5 43:4 41:2 39:6 41:7

<sup>8: (</sup>b) Bezwada Extension railway (5' 6" gauge)-

Details of construction-This railway is 20 58 miles long and extends from the Hyderabad frontier to Bezwada. Its construction was sanctioned in 1886 and it was opened in 1889.

Permanent-way. - The line is laid with 661-lb. flat-footed steel rails on steel pen-pod sleepers, except at miles 317 and \$18 which are laid on wooden sleepers. \*\*

Ballast.—The line is ballasted throughout with stone and sand.

and the second of the second o

Feneing.—The line is fenced at stations only.

Curves.—There are no curves with a radius of less than 1,900 feet.

Gradients. - The ruling gradient is 1 in 100.

Terms of contract—
The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5' 6" gauge system bear to the aggregate gross earnings for the same half-year plus 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock, and the cost of Government Audit establishment and interest on joint works at Bezwada.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 8 Sub-heads (a) to (c). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.

8 (b) Bezwada Extension railway (5'6" gauge)—concld. Statistics of working—

								Tabi	.B I.				TAB	Le II.
	o	alend	lar y	ear.			Capital outlay to end of each year.	Gross surnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion expenses to earnings.
1887 1888 1889 1890	:	:	:	:	:	:	Rs. 9,11,654 11,56,237 13,46,302 13,90,830	Rs  .76,671 74,731	Rs.  16,326 16,318	  1 21 1 17	Rs. 16,363 39,357 53,530 54,530	Rs. 16,363 39,357 37,204 38,212	Rs.	
1891 1892 1893 1894 1895	:	:	:	:	:		14,11,077 14,17,674 14,21,456 14,26,901 14,31,642	87,367 98,779 1,08,986 1,71,016 95,119	29,699 28,347 33,972 71,270 95,119	2·03 2·00 2·39 5·00 6·64	56,26 <b>6</b> 56,584 56,888 57,122 57,239	-27,567 -28,237 -22,916 +14,148 +37,880	Included wi Guaranteed St proper.	th the Nisam's ate railway
1896 1897 1898 1899 1900	:	:	:	:	:	•	14,35,588 14,95,418 15,01,843 15,02,651 15,02,618	73,057 1,66,800 1,69,061 3,12,172 8,56,146	38,496 56,645 95,390 1,84,365 2,38,989	2.68 3.79 6.35 12.27 15.90	57,406 58,383 59,569 60,101	-18,910 -1,738 +35,821 +1,24,264 +1,78,883		
1901 1902 1903 1904 1905	:	:	:	:	:		11,51,678 11,60,425 11,77,047 11,75,731 11,78,645	2,77,177 2,89,663 3,25,363 2,93,153 3,47,490	1,56,929 1,40,329 1,67,432 1,53,358 2,04,239	13·63 12·08 14·22 18·04 17·83	35,509 46,375 46,617 46,898 47,046	+ 1,21,420 + 93,654 + 1,20,715 + 1,06,460 + 1,57,193		
1906	•	•	•	•	•		11,81,020	3,49,206	1,91,737	16:28	47,182	+1,44,555		

#### 8 (c) Hyderabad-Godavari Valley railway (3' 33" gauge)— Details of construction—

This railway connects Manmad with Hyderabad and is 391.13 miles long. Its construction was sauctioned in 1897 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on steel pea-ped sleepers from mile 0 to 3 54 and 39 to 49½, except within station limits, on steel and wooden sleepers from mile 302 to 384 and on wooden sleepers for the remainder.

Ballast .- The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 3771 to 381 and at all stations.

Curves .- The sharpest curve is of 1,483 feet radius.

Gradients.—The ruling gradient is 1 in 133.3.

#### Terms of contrapt-

The railway is worked under the following agreement :-

Agreement of.—16th March 1897 (between His Highnese the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

The general conditions of the agreement are as follows:-

Terms of contract.—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition, a sum of one per cent. per anum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway; after the expiration of the guaranteed period the interest payable thereon to be a first charge on the net earnings of the former line and a second charge on the surplus net carnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract .- Nil.

Thrus of working.—From the gross carnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares .- Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway,

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 8 Number (a) to (c) NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—condd.

8 (c) Hyderabad-Godavari Valley railway (3' 8}" gauge) -- concld.

Statistics of working-

													Таві	е І.						TABL	a II.
		,				Cale	ndar ;	year.						***		Capital outlay to end of each year.	Gross carnings.	Not earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1896 1897 1898 1899 1900	:	:	:	:	:		:	:	:	•	:	:	:	:	 : :	Rs. 3,74,350 17,64,352 86,55,416 2,00,21,97 <b>9</b> 2,31,94,817	Rs.  63,381 10,63,023	Ra.  36,877 4,20,826	  0·18 1·81	Rs 48 70	 41.82 60.41
1901 1902 1908 1904 1905	:	: : : : : : : : : : : : : : : : : : : :	:	: : : : : : : : : : : : : : : : : : : :	:	: : : : : : : : : : : : : : : : : : : :	: : : : : : : : : : : : : : : : : : : :	:	: : : : : : : : : : : : : : : : : : : :	: : : : : : : : : : : : : : : : : : : :	: : : : : :	: : :	:	:		2,44,37,419 2,57,75,220 2,62,07,241 2,64,85,096 2,68,15,349 2,69,36,746	20,10,033 22,88,043 22,14,752 22,11,781 29,64,122 30,32,503	9,23,300 9,67,892 8,86,291 7,74,804 13,29,009 14,21,747	3·77 3·76 8·38 2·93 4·96	99 112 109 109 146	54·07 57·70 59·98 64·97 55·16

Number Main hoad 9 . NORTH WESTERN (STATE) RAILWAY SYSTEM-

Lines comprising the system.—The North Western (State) railway system is made up of-

			Under con- struction	_100
		Open line,	or sunctioned for construc- tion.	Total.
		Miles.	Miles.	Miles.
(a) North Western (State) railway (5' 6" gauge)		3,971.71	268.94	3,640 65
		27.49		27.49
(b) Amritsar-Patti railway (5' 6" gauge)		15.98	•••	15.98
(c) Jammu and Kashmir (Native state section) (5' 6' gauge)		78.65	•••	78·65
(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)			•••	
(e) Rajpura-Bhatinda railway (5' 6" gauge)		107.05	***	107-05
(f) Southern Punjab railway (5' 6" gauge)		. 425.33	•••	425.33
(g) Southern Punfab "Ludhiana" Extension railway (5' 6" gauge)		155.05	•••	155.05
(h) Khushalgarh-Kohat-Thal cailway (2' 6" gauge)		. 91.78	•••	91.73
(i) Nowshern-Durgai railway (2' 6" gauge) (j) Dandot Light railway (2' 0" gauge)		40.25	•••	40.25
(i) Dandot Light railway (2' 0" gauge)		. 6.18	•••	6.18
(k) Jullundur-Kapurthalla-Bultanpur (British section) . } Gaugo	not yet	finally {	6.80	6.80
(l) Jullundur-Kapurthalla-Sultanpur (Native State section)		(	22.02	72.02
	Total	4,319.42	297.76	4,617:18
Running powers—		•	************	
remaining positions				Miles.
Home line over foreign line:-				
East Iudian railway, Ghaziabad to Delhi, for passenger and goods trains				. 1800

#### 9 (a) North Western (State) railway proper (5' 6" gauge) -Details of construction-

The open mileage of the North Western (State) railway proper is 3,371:71 miles, of which 199:77 miles are doubte line. This may be divided into (1) the Counterfial section, main line (Ghaziabad to Peshawar and Lahore to Karachi), 1,444.70 miles, and branches, 802.69 miles; (2) Military section, Sind Sagar, main line (Lala Musa to Sher-Shah), 344.59 miles, and branches, 227.14 miles; (3) Military section, Sind Pishin (Ruk to Chaman), 336.03 miles; (4) Military section, Mushkaf-Bolan, main line (Sibi to Chetta), 86.74 miles, and branches, 35.74 miles; (5) Military section, Mushkaf-Bolan, main line (Sibi to Chetta), 86.74 miles, and branches, 35.74 miles; (5) Military section, Quetta-Nushki (Spezand Junction to Nushki), 83.04 miles; and (ii) Perhawor-Jamrood branch, 11.04 miles. first sanction to the main line of this railway was given in 1859. It was opened through to Peshawar in 1883 and from Lahore to Karachi in 1889.

There are 203.94 miles, single line, under construction and 204.15 miles of existing single line are in course of being doubled.

Permanent-way .- The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flatfooted, 68-lb. double-headed, 60-lb. bull-headed, 82-lb. double-headed and 68-lb. bull-headed; of steel rails there are 70-lb. flat-footed, 62-lb. flat-footed, 65-lb. double-headed, 68-lb. double-headed, 75-lb. double-headed, 68-lb. bull-headed, 75-lb. bull-headed, 68-lb. bull-headed, 84-lb. bull-headed, 100-lb. flat-footed, 77\frac{1}{2}\frac{1}{1}\frac{1}{2}\ On the double line, of iron rails there are 68-lb. double-headed; of steel rails there are 68-lb. double-headed, 75-lb. flat-footed, 771-1b. bull-headed and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced from Karachi to Lahore and from Lala Musa to Ghaziabad, also from Ruk to Jhatpat. The line between Lala Musa and Peshawar is partially fenced.

Curves.—The sharpest curve is of 408 feet radius.

Gradients.—The ruling gradient between Kotri and Rohri, and Sibi and Ruk, is 1 in 500; between Ghaziabad and Lala Musa, and Kotri and Lahore, 1 in 400; between Karachi and Kotri, 1 in 189; and between Lala Musa and Peshawar, 1 in 100. The ruling gradients on the Sind-Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts-Nil. The line is owned and worked by the State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 9}}{\text{Sub-heads }(a) \text{ to }(b)}$ . NORTH WESTERN (STATE) BAILWAY SYSTEM—contd.

9 (a) North Western (State) railway proper (5' 6" gauge)—concld.

Statistics of working-

				TAI	BLE I.	•			١.						TA	BJ·E	11.						
***********	1						ını			Ĺ,	· Sind•	P	ınjab-	<u> </u>	Indus	[			Nor	th B	Pesti rn	(Stat	r).
	Capital outlay to end of each year.	Gross carnings.	Not esrungs.	capiral outlay.	Interest.	Annusty.	prefit paid to Company	Gaon or loss to the State.		and	unjab Delt.i, 5' 6".	No	rthein, 'C".	Vall Kan	y and idahar, 5'6".	Path 5	ritor- mukot '6".	(1)	iou.	, .,	tilitary ection.	-	Entire
Calendar year.				Per echt, on			s lque		Calendar year.	Lamines 10		Earning for	Pro of trp:	Earnings p.	Pro of tap:	Euronags per	Pro : of exp :	Parnurgs por	Pro of exp to carulage.	STITE S	Pro: of exp	Earnings per	Pro : of exp :
879 .	Ra. 21,67,G3,237	Rs. 1,51,27,621	R4. 55,36,47€	2.55	Rs. 1,00,29,015	R	R.	- 11,92,11	1461	184 59		Ra		Ľя.		Вн 		Rs		18 11	1	Re	
<b>86</b> 0 .	25,05,35,401	1,00,30,666	75,55,661	3.03	1,11,50,90		21,12.	+36,00,39	1862					::				"		-		-	1
881 .	26,38,29,396	90,04,72	46,13,547	1.73	1,17,64,80			-71,51,32		17	1	J							1				1 "
683 .	27,49,44,870	82,43,07	67,96,011	2 11	1,05,53,712			17,87,70	1865 1866	1.				-					1	-		-	1
883 <b>.</b>	29,19,15,806	1,03,41,14	67,10,24	3-69	1,07,49 931			20,24,68	1	1.2	1										i		
884 .	20,20,27,775	1,07,68,748	88,21,631	9 03	1,18,26,70)			-30,05,070	1869	i	1	1				   			\	"	:   :::		
885 .	31,69,13,458	1,49,78,9%	1,37, 14,127	4 34	1,01,98,097		1,25,953	-29,80,52	1870	+ -	76 16	¦		-							.		
986 .	33,88,68,533	2,53,60,001	1,10,02,830	351	1,14,07,156	63,00.793		-47,15,049	1471	1	2   99 05 1 85 7″												-
987 .	30,10,49,700	2,10,03,38	57,77,586	1.60	1,01,56,755	SH,30,323		-1 33,09,510	1673	15	1	i											
. 88	37,50,59,629	2,57,79,30	83,66,595	2 23	1,00,18,038	83 45,756		-1,08,05,09	1874	16	1	,   61	63:41						:			-	
89 .	39,73,09,431	2,52,06,820	1,02,81,711	266	1,13,76,510	83,98,768		91,90,51	1876	1	67:03	101	ì	-									-
90 .	41,51,87,159	2,73,99,037	1,02,57,001	2 47	1,16,60,585	71 51,323		—88,63,30;	1×77 1×79	23	1	130	i	P(:	122.07							-	-
91 .	41,87,30,971	3,25,78,355	1,21,32,521	2 90	1,20,67,512	80,05,290		<b>-79, 40,321</b>	1870 1850	317	1	312	ı	121	81.10		•••		ļ				
93 .	42,71,90,670	2,64,35,665	94,50,960	2.21	1,24,26,030	89,84,076		1,10,59,110	1630	35;		104	1.	209 155	71·15 79 73		•••				::	:::	-
os .	13,71,03,581	2,92,68,732	97,97,643	2 21	1,27,61,652	90,98,545	***	-1,20,02,584	1852 1853	258 296	1	151	F3 71	111	C9:17					,	<del> </del>		
04 .	44,78,05,025	3,23,14,097	1,28,25,141	2.90	1,21,63,276		••	- 99,97,343	1884	290		139	72:34	203 210	55 55 69-40	67	65·78					:"	
DB .	46,28,14,462	3,52,18,382	1,64,16,999	a3·6	1,35,61,193	1,03,17,395		<b>-73,71,58</b> 0	1886 1886	373	57:35	165	62 69	309	40.82	81	40.5H	•••	•••	-			
06 .	47,81,00,802	2,94,11,710	1,18,96,100	2.19	1,42,35,427	96, 13,598		-1,19,92,606	1587													261 182	1
7 .	18,79,25,286	8,29,03,149	1,40,70,497	3.02	1,45,10,299	00,05,191		86,56,59°	1848 1880		!						,					1	67.3
		3,70,01,912	1,85,74,360		1,50,11,150	48,85,840		51,02,949	1890									200 283	50·63 64 05	68 60	107.75	510 527	63'3
. •	50,01,64,031	3,52,21,759	1,00,69,223	- 1	1,50,10,208	85,61,498		-75,12,391	1891									314 250	55.00 55.28	89	133-41	261	62.84
	Į	3,15,23,237			1,54,25,164	85,76 <b>,</b> 683		-1,07,82,005	1893									313	60.50	70 69	122.71	208 230	64-25
	1	4,11,80,277	-	- 1	1,55,50,694	80,02,222		-37,96,445	1895							_		347	53·11 46·79	78 75	122 <sup>.</sup> 05 110·11		60.81
	2,53,16,084		- 1	- 1	1,50,60,500	65,81,455		71,80,021	1896		i				- 1		ł	. !	54.C8	75	97*77	- 1	59·55
	3,81,87,881	1			1,02,88,103	85,77,430			1898		ŧ			-	- 1		- 1	- 1	49.70 15.88	72 63	93·76 101·26	- 1	54·38 50·60
	4,52,89,823			1	67,34,700	85,77,430	]		1809		- 1				i		- 1	- 1	47.73	1		- 1	54.32
	7,60,84,021	i	- 1		,72,13,261	85,77,430		- 1	1900		- 1				- 1		- 1	- 1	52·94 45·41	- 1	- 1	- 1	59·02 50·32
٠ [	0,67,74,836	1,18,06,041	,93,40,019	4.63	,80,71,178	85,77,430	-	+26,93,311	1902		- 1			-	- 1		- 1	- 1	59-63	- 1	1	- 1	29.63
	1		.					1	1903 1904	-	- 1			_		- {	- 6	- 1	44·42 42·29	- 1	i	294 361	
	- 1							•	1905		- 1	-		-			-	483	40.02	75	04-62	838	50.46
1									1906		-	-1	-			•		408	48-23	77	101.07	343	51'57

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 9 sub-heads (a) to (b) . NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

#### 9(1) Amritsar-Patti railway (5' 6" gauge)-

#### Details of construction -

This line, from Amritsar viá Tarn Taran to Patti, is 27.49 miles long. It was sanctioned in 1905 and opened in 1906.

Permanent-way.—The permanent-way consists of 60-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The line has not been yet ballasted.

Fencing .- Station yards only are fenced.

Curves .- The sharpest curve is of 2,292 feet radius.

Gradients .- The ruling gradient is 1 in 400.

#### Terms of contracts-

The railway is worked under the following :-

Contract of -22nd March 1905 (between the Secretary of State and the Amritsar-Patti Railway Company) for working.

The general conditions of the contract are as follows :-

Government aid.—A relate is allowed up to 45 per cent of the gross earnings from traffic (except the earnings derived from the carriage of stores) interchanged between the North Western railway and the Amritsar-Patti railway so as to make up an amount equal to interest for the year at a rate of 5 per cent, per annum on the actual capital expenditure plus Rs. 6,000 for each year for or towards the office expenses and the expenses of management and direction. Land provided free.

Currency of contract.—Government may, by giving 12 months' notice, determine the contract on 31st December 1935 or at the end of any subsequent period of 10 years paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years but not exceeding by more than 20 per cent-the total capital expenditure of the Company nor being less than such capital expenditure.

Terms of working.—Government undertake to work and maintain the line and provide rolling stock at 45 per cent. of the gross earnings. When the net earnings of the Company in any year shall exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum such excess shall be applied towards the payment of office expenses and the expenses of management and direction up to a limit of Rs. 9,000 for such year and the balance, if any, shall be divided equally between Government and the Company.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western railway.

#### Statistics of working.-

		TABLE I.			Таві	E II.
Calendar year.	 Capital expenditure to end of the year.	Gross carnings.	Net carnings.	Per ceat. on oupstal outlay.	Earnings por mile por week.	Proportion of expenses to earnings.
1	Rs.	Rs.	Ra.		Rs.	
1906	 11,90,964	15,368	8,452	0.71	. 69	45.00

#### 9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)-

### Details of construction-

This line, which extends from the Kasbmir frontier to the left bank of the Tawi river near Jammu, is 15.98 miles long. Its construction was sanctioned in 1888 and it was opened in 1890.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.-The line is ballasted throughout with broken stone.

Fencing.—The line is unfunced except at Sialkot station.

Curves .- The sharpest curve is of 2,865 feet radius.

Gradients. The ruling gradient is 1 in 500.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 9 Sub-hoads (a) to (l). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)—concld.

#### Terms of contracts-

The railway is worked by the State under the following agreement :-

Agreement of—2nd February 1906, having effect from 1st January 1903, (between the Government of India and the Kashmir Durbar) for working.

The general conditions of the agreement are as follows :--

Government aid.—Government allow this railway, in addition to 44.5 per cent. of the gross earnings of the Tawi-Suchetgarh section, a rebate payment on interchanged traffic to the extent necessary to give the Durbar a total dividend of 3½ per cent. per annum on the actual expenditure to the end of the half-year concerned as entered in rupees in the capital account of the said railway—subject to a maximum limit equal to the net earnings of the North Western (State) railway from traffic interchanged with this section.

Currency of agreement.—The agreement is current for a period of five years from 1st January 1903 and is terminable thereafter on six months' notice by either side.

Terms of working.—The North Western (State) railway works and maintains the line for 55 per cent. of its gross carnings, which includes both hire of necessary locomotives and rolling stock and the cost, subject to a limit of Rs. 30 per mile per annum, of such new minor works as are usually charged to revenue on the North Western (State) railway. The cost of additional works usually charged to capital is to be found by the Durbar, no charge being made by the North Western (State) railway for supervision of the construction of such capital works except where special establishment is required.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

#### Statistics of working-

						Т	ADLE I.				TABL	e II.
Cal	onda	r yo	ar.	Cupital cutlay to end of each year.	Gross earnings.	Not carnings.	Per cent. on capital outluy.	Robate from North Wes- tern (State) railway.	Total income.	Percentage on total income.	Earnings per mile per wook.	Proportion of expenses to carnings.
				Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1888 1889 1890	:	:	:	29,545 7,51,458 12,37,071	 45,667	 13,770	i'n	:::	. :::	 	h ::::	
1891 1892 1893 1894 1895	:	:	:	13,80,083 9,45,302 9,56,327 9,59,773 9,60,010	57,312 41,718 54,637 60,463 56,239	15,904 15,444 14,332 17,553 25,026	1.15 1.63 1.50 1.83 2.60		`			vith the North State) railway.
1896 1897 1898 1899 1900	:	:	:	9,60,011 9,65,151 9,62,846 9,60,820 9,60,492	55,185 48,509 48,164 51,532 55,215	24,558 21,587 21,433 22,932 24,571	2·55 2·24 2·23 2·39 2·56	,  		  	58 62 67	55·50 55·50 55·50
1901 1902 1903 1904 1905	:	:	•	9,60,630 9,62,471 9,62,284 9,62,208 9,62,208	52,484 51,865 54,881 56,231 66,842	23,355 23,080 24,422 25,023 29,745	2·43 2·40 2·54 2·60 3·09	9,258 8,655 4,540	33,680 33,678 34,235	3:50 3:50 3:57	63 63 66 68 80	85°50 55°50 <b>55°50</b> <b>55°50</b> 55°50
1906			٠	9,78,566	77,688	34,571	8-58	681	35,255	8-60	93	55·80

#### 9(d) Ludhiana-Dhuri-Jakhal railway (5' 6' gauge)-

Details of construction-

This railway is 78.65 miles long. Its construction was sanctioned in 1899 and it was opened in 1901.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of crossted pine and deodar.

Ballast. The line is ballasted throughout with broken brick.

Fencing.—Only station yards and about 100 feet on each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,384 feet radius.

Gradients.—The ruling gradient is 1 in 400.

# History of railways constructed and in progress. [For Index see Page 112.]

Number Main head 9 RAILWAY SYSTEM—contd.

9(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)-concld.

Terms of contract-

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler-kotla and Jind Durbars) for construction and working.

The general conditions of the contract are as follows :-

Government aid .- Nil. The line was constructed at the cost of the Malerkotla and Jind Durbars.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. The contract may also be determined by the Secretary of State for breach of any of its provisions if they are not remedied within six months of being notified. Upon the determination of the contract the North Western (State) railway will give to the Malerkotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Malerkotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses the balance is paid to the Malerkotla and Jind Durbars to be divided between them in the proportion of 5th and 5ths, respectively.

Rates and fares. - Rates and fares as in force on the North Western (State) railway.

Statistics of working-

	 			 	TABLE	1.			Тавј	E II.	
	Cale	ndar	year		Capital outlay to end of each year.	Сгова съгнада,	Net carnings,	Per cent, on capital outlay.		Proportion of oxpenses to earnings.	Remarks.
1901 1902 1903 1904 1905		:	:	 :	R4 48,10,407 48,24,709 41,19,904 41,19,934 41,22,517 41,70,608	10% 2,02,297 4,05,005 3,15,026 3,46 059 5,15,007 6,44 063	Rs. 91,634 1,82,252 1,11,763 1,55,727 2,31,753 2,89,829	2·11 4·21 3·44 3·78 5·62 6·95	Rs.  68 99 77 85 126	55:00 55:00 55:00 55:00 55:00	The decrease in Capital outley in 1903 was due to credits.

# 9(e) Rajpura-Bhatinda railway (5' 6" gauge)--

Details of construction-

This railway is 107:05 miles long. Its construction was first sanctioned in 1883 and it was opened through in 1889.

Permanent-way.—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers, and from Patiala to Bhatinda with 75-lb. flat-feoted steel rails on crossoted pine and deodar sleepers.

Ballast.-The line is ballasted throughout with broken brick.

Fencing.—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curres.—The sharpest curve is of 1,146 feet radius.

Gradients .- The ruling gradient is 1 in 500.

#### Terms of contract-

The railway is owned by the Patiala State and is worked by the North Western (State) railway under the following:—

Contract of—30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working.

Government of India letter No. 817 R.T. of 5th October 1903, sanctioning the reduction in the percentage of gross carnings to be retained by the North Western (State) railway for working, from 55 to 52, with effect from 1st January 1904.

The general conditions of the contract are as follows :-

Government aid .- Nel. The line was constructed at the cost of the Patiala Durbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indomnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—55 per cent. of the gross earnings to end of 1908 and 52 per cent. thereafter.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

History of railways constructed and in progress. [For Index see page 112]

Number  $\frac{\text{Main head}}{\text{Sub-beals }(a) \text{ to }(l)}$ . NORTH WESTERN (STATE) RAILWAY SYSTEM—cont. d.

9(e) Rajpura-Bhatinda railway (5' 6" gauge)-concld.

Statistics of working-

											TA	HLE	I.				TAB	LE IL
				C:	alon d	ar y	our.			•			Capital outlay to end of each year.	Gross carnings,	Net carmings.		Earnings per mile per week.	Proportion of expenses to carnings.
				*								-	Ra.	Ra.	Es.		Rs.	
188 <b>i</b> 1885	:	:	:	:	;	:	:	:	:	:	:	:	14,12,259 12,29,141	5,111 48,709	196 1,255		17 50	100-72 106-09
1886 1887 1883 1880 1890	:	:	:	:	:	:	:	:	:	:	·• :		12,29,141 12,43,250 22,61,990 62,83,918 65,00,331	61,623 Not availabl 1,02,480 5,66,946	9 { 15,816 15,425 18,640 58,103 2,55,126	172 124 082 093 399	78 Included wit orn (State) 74 101	78-63 h North West railway. 55-00 55-00
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:		65,81,553 66,41,582 67,26,941 67,01,669 67,02,457	7,19,859 5,64,653 6,54,447 12,59,432 18,18,902	3,23,937 2,50,524 3,97,956 5,66,565 5,93,506	4:93 3:83 4:58 5:15 8:66	128 100 122 224 235	55:00 15:00 56:00 55:00 55:00
1896 1897 1898 1899 190 <b>0</b>	:	:	:	:	:	:	:	:	:	:	:	•	66,05,813 66,96,451 67,04,510 67,95,785 67,95,785	9,97,526 6,96,927 7,02,637 6,79,520 6,93,504	4,19,052 3,10,617 3,16,187 3,05,784 3,12,211	6 71 4 63 4 72 4 56 4 66	173 121 125 122 125	55.00 55.00 55.00 55.00 55.00
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	•	67,10,423 67,12,917 67,18,8(0) 67,23 + 0 67,18,831	8,00,012 8,10,017 9,64,002 10,67,935 12,7,3390	3,57,289 3,74,426 4,34801 5,12604 <b>6,</b> 61,628		155 151 173 192 225	55:00- 55:00 55:00 52:00 52:00
1906													68,02,550	11,97,173	5,69,825	8:37	213	53.00

9(/) Southern Funjab railway (5' 6" gauge)-

Chairman.—Sir Bradford Leslie, M.I.C.E., K.C.I.E. Secretary.—Urban Broughton, Esq.

Offices .- 70, Cornhill, London, E. C.

The railway runs from Delhi, ria Bhatinda, to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles as compared with the route vid Umballa and Lahore. Details of construction-

The mileage amounts to 425:33 miles, which may be divided into main line (Delhi to Samasata), 401:95 miles, and branch, 23-38 miles. The main line was opened through in 1897.

Permanent-way.—The permanent-way consists of 75-lb, flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast .- The line is ballasted throughout with broken brick.

Fencing .- Only the station yards are fenced.

Curres .- The sharpest curve is of 2,100 feet radius.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contract of -13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal beanch.

4th October 1905 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Southern Punjab "Ludhiana" extension, 9 (y).

The general conditions of the contracts are as follows:-

Government aid .- Government allow the Company in respect of each half-year, by way of relate on the net earnings of the North Western (State) tailway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net carnings of the North Western (State) railway) as together with the Company's net carnings make up an amount equal to interest for the year at the rate of 31 per cent on the actual rupee expenditure charged in the capital

account. Land was provided free of cost to the Company.

Currency of contract.—Government may, by giving twelve months' notice, determine the contract on the 31st December 1923, or at the expiration of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent, the total capital expenditure of the Company in sterling nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1943, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

Power of Company to surrender contract .- Nil.

History of railways constructed and in progress. [For Index see page 112.]

Number Main head 9 Sub-head (a) to (l). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(f) Southern Punjab railway (5' 6" gauge)-concld.

Terms of contracts-conold.

Terms of working .- Government undertake to work and maintain the line and provide rolling-stock at 52 per cent. of the gross earnings. Surplus profits in excess of 3\frac{3}{2} per cent, per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Samasata, but excluding the Patiala State railway. which passes over the Southern Punjab railway. The Compuny, in addition to its carnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western (State) railway and foreign lines.

Rates and fares .- Rates and fares are fixed by Government within the maxima and minima rates and fares

in force on the North Western (State) railway.

Statistics of working-

,					Таві	ь I.			•	TAI	BLE II.	
Calen	lar y	ear.	Capital outlay to end of each year.	Gross eacuings,	Net carmngs.	Percentage on capital outlay.	Rebate from : N. W. (S.)	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week	Proportion of expenses to earnings.	
			Rs.	Rs.	Rs.		Be.	$\mathbf{R}_{\mathbf{s}}$		Rs.		Adjustments under
1895			21,49,441							•••		the Cripps' award
1896 1897 1898 1893 1900	:	:	1,30,67,048 1,99,08,812 2,23,62,921 2,26,68,262 2,26,57,963	1,61,038 16,29,122 16,11,010 16,36,289	77,298 7,81,978 7,73,285 7,89,360	0:39 3:49 3:41 3:48	19,942 17,314 3,562	97,340 7,81,978 7,90,663 7,92,923	0°19 3 19 3°49 3°50	 52 74 73 74	52.00 52.00 52.00 52.00	were brought into account in 1901, but in these statis- ties they have been adjusted and allo- cated to the proper
1901 1902 1903 1904 1905	:	:	2,25,70,734 2,27,93,660 2,28,27,996 2,29,43,454 2,30,13,696	24,96,333 19,41,541 21,59,158 27,47,442 36,10,372	11.98.240 9.31,940 10.86.396 13.18.772 17,47,379	5/31 4/09 4/34 5/74 7/5/4		11,98,240 9,31,940 10,36,396 13,18,772 17,47,379	5:31 4:09 4:51 5:74 7:59	113 88 98 124 165	52:00 52:00 52:00 52:00 52:00	уошгч.
1906	•	•	2,31,30,148	41,67,059	20,00,188	3:65		20,00,188	8:65	183	52-00	

# 9(g) Southern Punjab "Ludhiana" extension (5' 6" gauge)-

Details of construction -

The open mileage, from Ludhiana, vid Ferozepore, to McLeod Ganj is 155.05 miles. This extension was sanctioned in 1903 and opened through in 1906.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers.

Bullast.—The line is being ballasted chiefly with brick.

Fencing.—Only station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are being fenced.

Curves .- The sharpest curve is of 1,910 feet radius.

Gradients.-The ruling gradient is 1 in 400.

Terms of cofftract-

This railway is worked as a part of the Southern Punjab railway under the contracts and conditions relating to that

railway [9 (f)], except as follows:-

Government aid .-- Government allow the Company, by way of rebate on the net carnings of the North Western (State) railway from traffic interchanged or sent over any part of the Company's lines including the Ludhiana extension, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the net carnings of the Company in respect of the Ludbiana extension will make up interest at the rate of 5 per cent, per annum on the capital expenditure of the Company in respect of the extension as charged in the capital account.

Currency of contract.—Concurrent with the contract contained in the Principal Indonture. If determined by notice of purchase on 31st December 1923, or at the expiration of any subsequent period of ten years, there shall be paid to the Company a sum equal to twenty-five years' purchase of the average of the Company's share of the net earnings of the extension during the five years immediately preceding such 31st December, subject to a maximum limit of 20 per cent. of the total capital expenditure on the extension and a minimum of the total sterling capital expenditure of the extension; if determined by notice of purchase on 31st December 1948 then the total amount of such capital expenditure as aforesaid in sterling.

Terms of working .- Surplus profits in excess of 5 per cent, per annum on the total capital expenditure are divisible at the close of each year between the Company and the Secretary of State in the proportion of one-fourth to the former and three-fourths to the latter.

Statistics of working.

							TABLE I	I.				TAB	le II.	
Cal	lend	lar	Lea	r.	Capital outlay to ond of each year.	Gross carnings.	Not earnings.	Per cont. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Per cent, of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	_
					Re.	Ra.	Rs.		Ba	Be.		Re.		
1905 1906	:		:	•	70,09,669 79,33,781	78,332 6,29,557	35,200 3,02,187	0·50 8·81	10,509 33,818	45,700 3,35,505	0·65 4·38	68 83	52-00 52-00	

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 9 Sub-heads (a) to (b). NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(1) Khushalgarh-Kohat-Thal railway (2' 6" gauge)-

Details of construction-

The line is 91.73 miles long. Its construction was sanctioned in 1900 and it was opened through in 1903.

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lbs. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25-lb. and partly with 21-lb. rails, partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing .- The line is unfonced.

Curves .- The sharpest curve is of 239 feet radius.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83:3 and between Kohat and Thal 1 in 100.

Terms of contract.—The line is owned and worked by the State.

Statistics of working-

		TABLE II.	
TAULE I.	Calchdur year.	Earnings por unle per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway	1902 1903 1964 1905 1906	Rs. 31 31 34 38 50	67-88 174-56 222-38 166-36 143-48

#### 9(i) Nowshera-Durgai railway (2' 6" gauge)-

Details of construction-

This railway is 40:25 miles in length. Its construction was sanctioned in 1899 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Bullast .- The line is ballasted throughout with broken stone.

Fencing .- The line is unfenced.

Curves .- The sharpest curve has a radius of 477 feet.

. Gradients .- The ruling gradient is 1 in 100.

Terms of contract.—The railway is owned and worked by the State.

Statistics of working-

		Table II.	
Table I.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway	 1902 1903 1904 1905 1906	Ra. 51 53 69 68 72	152°27 101°67 97°29 109°17 92°46

# 9(j) Dandot Light railway (2' 0" gauge)-

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the second portion (1.29 miles) there is another incline worked by gravity alone.

#### Details of construction-

The line is 0.18 miles long. The section from Dandot station to the mouth of the main mine was opened in 1889.

Permanent-way.—The permanent-way consists of old metre gauge 36-lb. and 40-lb. rails laid on decdar sleepers.

Ballast .- The line is ballasted throughout with broken stone.

Fencing .- The line is unfenced.

Curves .- One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contract.—The line is owned and worked by the State.

Statistics of working .- Included with the North Western (State) railway.

# Distory of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main hoad 9}}{\text{Sub-heads }(a) \text{ to }(\vec{l})}$ . NORTH WESTERN (STATE) RAILWAY SYSTEM—concld.

#### 9(k) Jullundur-Kapurthalla-Sultanpur (British section)-

This line, which will be 6.80 miles long, has not yet been commenced, nor has the gauge been settled.

# 9(1) Jullundur-Kapurthalla-Sultanpur (Native State section)-

The Native State section will be 22.02 miles long. The same romarks apply to this as are made against the British section.

# Number Main head 10 sub-heads on to (c). OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—

Lines comprising the system.—The Oudh and Robilkhand (State) railway system is made up of-

									e			Open line.	Under construction or smetting d for construc- tion,	Total.
	(a) Oudh and Robikhan I (State) r.ulway {	6161 (31.34)	gange) ' gaug;		:	:		:	:		:	Miles, 1,210°75 1.81	Malos. 99:15	Milos. (1,309 90 1:81
	(b) Hardwar-Dehra tailway (5' 6" garge)											::2 01	•••	32.01
	(c) Campore-Burhwal link (3' 32" gauge)	•		•	٠	•		•	٠	٠	•	79 60	•••	79.60
									T	otal		1,224 20	99 15	1,428.35
Run	ning powers—		•										**********	Miles.
	Home line over Foreign line:  Ghazinbad to Delhi, East Indian roil  Foreign lines over Home line.  Great Indian Poinsala railway at Ca  , Cawin  East Indian railway, Mogbal Sarai to	mnpo pore to	ro • Intela	woo	grant	ed f.s	r pas	-enga	r and	l 15.mn	ls (r	oins, but exci		. 13:00 dy. { 0:86 14:63 . 10:00
	Bongal and North-Western railway.	Benar	nporat ndes ( su Ca atate):	ntonsi	ent t	80	ы св	City	nd D ' B;" (Ou-	aligar gangi Bi an	oj fe o) .d Re	Barhwal hohilkhand	for passenger and goo	79.60 1.81 81.41

# 10(a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)-

The Oudh and Robilkhand railway was acquired by the State from the late Guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Chrow and Company connects the Rosa Sugar factory with Rosa station on the Oudh and R hilkhand (State) railway. This tramway is 3.25 miles long and is worked by manual power. It is used for goods traffic only.

#### Details of construction.

В

The total open mileage of the railway is 1,212:56 miles. This may be divided into (1) Main line (Moghal Sarai to Saharampur), 518:19 miles; (2) Benares-Lucknow loop, 199:03 miles; (3) Barcilly-Moradabal loop, 70:50 miles; and branches, 422:73 miles; and 181 miles of 3' 3%" gauge at Benares.

First sanction to construction was given in 1864. The main line vid Rai Bareilly was opened through in 1898. The Benares-Lucknew loop was opened through in 1874 and the Bareilly-Moradabad loop in 1873.

There were 10.67 miles under construction, and 88 48 miles sanctioned but not commenced.

Permanent-may — The main line and Benares-Lucknow loop are laid throughout with 75-lb. flat-footed steel rails. So are most of the brunches, although some 60-lb. flat-footed steel rails are still to be found in a few of the branches, e.g., the Aligarh branch and in a pertion of the Barvilly-Moradabad loop. There are also a few miles of 60-lb. flat-footed iron rails in the Bahranghat and Madhoganj branches.

The sleepers are of the following types:—stamped steel bowls, east-iron pots, steel trough transverse and wood (sal, deodar, jarrah and New South Wales hard wood). There are a few wrought iron saddle back sleepers in the Kotdwara branch and Barcilly-Moradabad loop.

Ballast .- The main line is ballasted throughout with kunkur, stone, or shingle.

The branches are ballasted either with sand or earth with a covering of broken brick, kunkur or stone, except the Allahabad, Delhi, Cawapore and Hardwar branches which are ballasted with kunkur, stone or shingle.

Fencing .- The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches.

Curves .- The sharpest curve on the line is of 1,000 feet radius.

Gradients.—The ruling gradient of the whole of the railway is 1 in 400.

# Terms of contract-

Nil. The railway is owned and worked by the State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 10 Sub-heads (a) to (c)

OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM-contd.

10 (a) Oudh and Rohilkhand (State) railway proper (5' 6" gauge)—concld.

Statistics of working-

		•						T.	BLE I.					TAB	LE II.
	Cal	ondar	, year	•			Capital outlay to end of each your.	Gross earnings.	Net carnings.	Per cent, on capatal outlay.	Interest.	Surplus profits paid to Company.	Class or loss to the State.	per mile	Proportion of expense to earning
<b></b>							Ra.	R	Tis.		Rs.	Ra.	Rs.	Ra,	
67 .											.,,			71	106-97
68 .												•		120	64.54
69 .						•		. 1	•••	•••				97	81.74
70 .	•	•	•	•	•	•		. 1		•••	•••			112	227-93
71 . 73 .	•	•	•	•	•	:	:::	.			•••			117 56	69:31 68:51
73	•	•	:	:	:			:::						56	72.9
71 .	:		i.	•	•			1				=		72	64.41
75							•							97	59.7
76 .									•••					120	63.93
nm							1				ļ			153	52:88
77 . 78 .	•	•	:	•	•	•								163	54.28
	•	•	•	•	•	•		1	••	•••		<b>3</b> .		100	
79 · 80 ·	:	:	:	:	:	:	5 86,75,764 6,02,21,081	40,13,943 44, 7,150	18,19,936 19,01,400	3 1 t 2·16	28,60,000 25,19,246	:::	-9,80,064 -9,15,537	153 157	58·11 57·20
٧1 .	_			_			6,25,30,935	49 18 750	19,75,690	3:16	29,14,107		- 9.38 138	173	59.9
.2	·						6,52,59,839	49, 38,750 5, 79,514	18.01.371	2 78	30,67,6.22	!	-12,66,251	185	65.7
83 -					•		17,07,69,44c .	04.50.40.1	24,80,362	3 50	31,25,495		-6,55,1.0	192	£4·5
~ h .			•				7,91.13,383	52,75,198	23, 26, 146	201	41,11,.87		-17.88,441	182	55.8
85 .	•	•	•	•	•	•	8,73,31,426	1., 1.,150	17,95,361	2 10	46,53,333	•••	-28,57,972	176	65.2
s6 .							8,95,12,755	65,65,103	28,00,755	3:24	51,59,011	1	- 23,27,259	180	56.0
57	•	:	· ·		•	:	9,17,06,668	66,16,31.3	31, 5, 219	3.12	53.98.339	:::	-22,63,690	186	52.8
18	·					·	9,18 11,619	$70.7 \pm 0.53$ $\pm$	30,16,005	3 28	53,98,339 51,67,194	1	- 21,51,49	197	67.8
(6.9)							9 22 32,236	75,75,553	12,04,076	4 56	19,71,598		-7,67,822	209	44.
S90 .	٠.	•	•	•	•	•	5,27,89,180	73,31,396	37,51,47	4.05	44,23,109		-6,68,631	205	49.1
. 10.							9,28,38,318	85,64,200	10.40 (10	5:02	47.97.000		+ 2,16,792	238	62-2
02	•	:	:	:	:	:	10.34.95.685	85,42,E36	49,42,458 50,16,379	4.81	47,25,660 52,79,411		-2,63,062	237	41-2
93	•						10,00,17,202	87,15,926	50,17,053	4.97	55,01,058		~ 4.84.005	239	42.4
511							10.28 7.184	1,05,15,536	57,36,138	5.58	65,11,123	1	- 5,74,995	262	45
305 .	•	•	•	•	٠	•	10,65,65,118	1,02,01,550	52,55,948	4 9;	63,60,949		-11,14,001	248	48.8
200							10.92,69,495	Set 07 070	02.50 cm²	2,0.	61,30,729		-17,79,822	209	49:5
39 <b>6</b> 39 <b>7</b>	•	•	:	:		•	11,11,19, 9	86,97, <b>076</b> 85,15,*56	43,56,607 26,96,273	3:05 3:23	19,77,186		- 22,80 708	186	561
398	:	·			÷		11,64,99,234	98,4,100	51,05,7.7	4.56	58,76,317		-5,69,520	196	46
99							12,21,81,123	1,11,35,950	60,76, 495	4:17	59,75,292		+1,01,393	208	45
. 000			•	•		•	12,55,91,860	1,15,15,132	55,31,727	4:45	62,24,185		-6,36,458	208	51.
34.1							12.8 : 66,865	1,32,54,991	F0.00.105		63,12,014	1	+ 9,07,963	231	
101 . 302 .	•	•	•	:	:	•	13,65,17,057	1,31,65,792	72,20,607 64,11,526	5 60 4:70	64,75,905		+ 0,07,863 - 61,569		45°
000	:	:	:	:	:	:	11.52,62,379	1,39,19,523	77,31,502	4:8	68,00,305		+4,31,557	236	48
004	:	·					114.97.63.929	1,5 : 26 266	71,33,117	4 76	70 55.640	1	+77.177	235	53
005 .				•			15,37 92 969	1,58 85,913	63,43,667	4.13	71,68,431		- 8,24,764	235 238	58
							15,71 99 731	1.61.65.000	#0 1 F F = -			1	10 10 707		1
006 .				•	•	•	10,1100 131	13,64.67 329	78.15.731	4.97	75,66,010	•••	+2,49,721	249	52

10 (b) Hardwar-Dehra railway (5' 6" gauge) --

Details of construction-

This railway is 32:01 miles long. Its construction was sanctioned in 1898 and it was opened in 1900.

Permanent-way.—The permanent-way consists of 75-lb, flat-footed I. S. R. steel rails on decdar and sal sleepers.

Ballast.-The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing .- The line is fenced throughout.

Curves.-There are no curves with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 75.

#### Terms of contract-

The Hardwar-Dehra railway is worked under the following contract :-

Contract of -26th March 1897 (between the Sceretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :-

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 laklis of rupees as capital and, except for bond fide temporary purposes at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1910 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly not earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract .- Nil.

History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) to (c). OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—concld.

10 (b) Hardwar-Dehra railway (5' 6" gauge)-concld. Terms of contract-concld.

Terms of working.—After deduction of 50 per cent. of the gross carnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares .- Rates and fares to be arranged between Government and the working agency within one-andhalf times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway.

#### Statistics of working-

					TABL	e I,				TABI	LE II.	
Calen	dar :	year	Capital ontlay to end or onch year,	Gross carn-	Not carnings.	Per cent. on equital outlay,	Interest	Company's shore of not carnings	Gain or loss to the State.	Earnings per mile per week,	Preportion of exponses to carnings.	Remares.
1897 1898 1899 1900 1901 1902 1908 1904 1905 *1906			Rs. 1,96,617 10,70,345 28,42,657 25,67,003 23,12,301 28,276,456 28,11,642 20,12,202 29,20,650 29,24,254	Rs.  1,60,485 2,13,456 2,52,485 2,62,719 2,63,617 0,315,476 3,34,110	Rs. 80,213 1,06,728 1,26,032 1,31,550 1,01,738 1,67,055	 1 (3 2 50 4 45 4 62 4 52 5 37 5 71	Rs	Re        	R:. +22,508 +29,502 +21,979 +46,631 +39,664	Rs	50:60 50:00 50:00 50:00 50:00 50:00 50:00	Interest up to 1900 was charged to capital and not carnings of 1900 were capital in reduction of interest charges.

#### 10 (c) Cawnpore-Burhwal (3' 33" gauge) link-

The construction of the Camppore-Burhwal (3' 33" gauge) link was sanctioned as a part of the project for linking up the 3' 3 gauge systems of Northern India.

### Details of construction-

The link is 79:60 miles long. Its construction was sanctioned in 1894 and it was opened through in 1897.

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on decdar sleepers.

Ballast.—The line is ballasted throughout with Lunkur, stone, or shingle.

Fencing .- The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

#### Terms of contract-

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rehilkhand (State) railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand (State) railway 80 per cent., which has, with effect from the 1st July 1905, been reduced to 75 per cent., of the gross receipts arising therefrom.

#### Statistics of working-

Included with the Oudh and Rohilkhand (State) railway [10 (a)].

Number-Main head 11 · ASSAM-BENGAL RAILWAY (3' 33" gauge)-

Chairman .- Lieuteuant General Sir Richard Strachey, R.E., G.C.S.I.

Managing Director .- James Mendows Rendel, Esq.

Offices. - Bishopsgate House, Bishopgato Street within London, E. C.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, 34-90 miles which was worked by the Assam-Bengal Railway Company up to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

# Details of construction-

The total open mileage of the line is 775.28 miles, which may be divided into (1) main line (Chittagong to Tinsukia), 576.61 miles, and (2) branches, 195.67 miles. The main line was opened through to Tinsukia in 1903.

Besides the above 35 miles were sanctioned for a astruction, of which 19 miles are actually under construction.

Parmanent-way. - The line is laid with 50-lb, flat-footed steel rails, partly on sal and pyinkado, and partly on bastard sel, nageshur and jarrah wood sleepers. The Neakhali branch is laid with 41 th steel tails on sal sleepers.

Ballast. The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

Fencing .- The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati, and half a mile from Gauhati towards Lumding, and at some stations on the hill section.

# History of railways constructed and in progress. [For Index see page 112.]

Number

Sub-head (a)

ASSAM-BENGAL BAILWAY (3' 3%" gauge) -contd.

#### Details of construction-concld.

Curves .-- The sharpest curve is of 358 feet radius.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding 1 in 60, with a 1 in 37 banking section 8.54 miles long; between Gauhati and Tinsukia, 1 in 100; between Laksam and Noakhali, 1 in 200; between Laksam and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150.

#### Terms of contracts-

The Assam-Bengal railway is worked under the following contracts :--

Contracts of -26th April 1892 (between the Secretary of State and the Assam-Bongal Railway Company) for construction and working.

—11th April 1906 (between the Secretary of State and the Assam-Bengal Railway Company)—supplemental to the contract of the 26th April 1892—for the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking, and for the application thereto, as from 1st January 1906, of the provisious of the principal contract of the 26th April 1892.

The general conditions of the contract are :--

Government aid.—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898 interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereoff, and generally all property, whether real or personal, (with the exception of monies paid against interest on the Company's share capital and sums applied from net earnings) are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half-years consecutively. On the determination of the contract the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.-Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

- (1) Contribution due to the Provident Fund, calculated at one per cent. of net earnings.
- (2) The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than ist the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1893) shall not exceed the rate for the time being applicable to the Company's share capital.
- (3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceeds in the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

## Statistics of working-

										TABLE	τ.					Тав	LE II.
и		N.		endar	year	:.	pr. 10-10,000.00			Capital outlay to end of each year.	Gross earnings.	Net carnings.	Per out. on orbital outlay.	Interest.	Gain or loss to the State.	Earnings por mile per week.	Proportion of expouses to earnings.
									`	Rs.	Rs.	ße.			Rs.	Rs.	
1891 1892	•	•	•	•	:	:	•	•		1,53,203 80,16,133				35,898 2,66,378	-5,893 -2,66,378	:::	•••
1898	:	:	:	:	·	:		:		1,07,68,192				7,09,987	7,00,987		•••
1894	٠	•	•	•	•	•	•	•		2,46,89,898	0,77,400			8,76,954	-8,76,954		***
1895	•	•	•	•	•	•	•	•	•	4,04,38,298	2,14,426	8,047	- 300	13,95,686	-14,03,688	64	183.75
1896										5,21,89,804	6,18,785	33,238	0.08	23,73,034	23,89,796	71	94.63
1897 1898	•		•						- 1	6,87,67,401	9,90,640	72,214	0.11	22,56,279	-21,84,005	68	92.71
1898	•	•	•	•	•	. •	•		•	7,56,41,721	13,06 124	54,551	鄉'07	24,45,275	23,90,721	86	95.83
1899	•	•	•	•	•	•	•	•	•	8,69,56,286	16,19,646	9,22,704	0·37 0·38	28,68,084 83,31,890	-25,40,880	75	80.08
1900	•	•	•	•	٠	•	•	•	•	9,56,01,772	17,09,953	3,64,364	0.39	09,91,900	-29,67,026	75	78.69
1001			_						ı	10,41,49,467	21,34,252	4,56,654	0.44	35,06,252	-30,49,598	70	78-60
1901 1902 1908 1904	:	:	:	:		•	•	:	:1	14,11,34,922	20,96,058	2,54,418	0.23	88,08,887	-35,58,969	68	87.86
1908										12,40,28,549	23,97,658	4,48,963	0.86	40.71,450	-36,27,487	72	80.21
3904					• .,			•		12.60,09,689	29,58,962	1,05,390	800	41,66,585	-40,61,145	77	94.78
1905	•	•	•	•						12,78,57,542	84,14,295	1,25,615	0.10	43,61,306	-41,35,691	88	94.68
1906		•	•	•	• ,	•	•	•	.]	18,25,20,704	42,20,064	4,27,858	0.32	41,58,917	40,26,059	104	89-86

History of railways constructed and in progress. [ For Index see page 112.]

Main hard 11 Sub-limit (a) . ASSAM-BENGAL RAILWAY (3' 38" gauge)—concld.

Statistics of working -concld.

Noakhali (Bengal) railway (3' 3\sqrt{" gauge})—

		TAULE 1.		,	TABL	r II.
Calendar year. Outley of each	to end tarons	Net   Per cent on contal ontly.	Relaty from A sur- Ben al rul- way	Por cent. of total rucome on cap.tal outlay.	Larnings per nulc per week.	Proportion of expenses to earnings.
1903 1904	Rs.   Rs.	Rs. 2.409 011	50,775 47,543 51,000 57.721	1·23 2·20 2·71	Rs. 30 31 38	92 00 105-79 97-57

Number Main hond 12 Sub-heads (a) & (b). BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—

Chairman .- Colonel T. Gracey, R.E., C.S.I.

Managing Director .- Alexander Lat, Esq., C.I.E., M. Inst. C. E.

Offices .- 237, Gresham House, Old Broad Street, London, E. C.

Lines comprising the system-The Bengal and North-Western radway system is made up of-

						Opin line.	Under construction, or sunctioned for construc-	Total.
(a) Pangal on l North-Western rulway (3')	~ inpa)	:	:	:	:	Miles. 95213 61470	110n. Milos. 142-16 104-06	Miles, 1,071 64 778 36
			Tot	ı		1 516 48	306 52	1,853 00

#### Running powers-

Home line over Fareen, len! -

Cumpore to Arshbach, Cran, re-Burkwal (3°3, ganze) link, Oudh and Bohilkh ind (State) rulway Arshbagh to Dalicang Tucknow-Barethy rulway Dalig in to Burkwal, Cawagoo Burkwal (5 3, cm.) link, Oudh and Rehdkh ind (State) rulway Ben iros Cantonmert to Benaris City, Oudi and Rohdkh and (State) rulway 15 03 3:10 Total

## 12 (a) Bengal and North-Western railway proper (3' 3\frac{3}{3}" gauge)-Dotails of construction-

The total open mileage of the railway is 932:18 miles.

This may be divided into (1) main line (Sonepore to Aj dhya) 237'09 miles; (2) loop line (Sonepore to Bunwarchak) 9'34 miles; and (3) branches, 685'75 miles. The construction of the main line was sanctoned in 1882 and it was opened through in 1885.

Besides the above there were \$2.67 miles under construction, viz., Dharonda to Maharajganj. 3.90 miles, Gorakhpur to Bagaha, 60 94 miles, and Savan to Thawe, 17:83 miles; and 59 79 miles, Borhwal to Sitapur, sanctioned for construction but not commenced.

Permanent-way. - The main line between Sonepore and Burhwal is laid with 50-lb. steel rails on sal sleepers. The rest of the line north of the Gogra is laid with 11}-lb, steel rails mostly on sal sleepers. The Ganges-Gegra Doab lines are laid with 50-lb, steel rails on sal sleepers with the exception of the Man-Aunrihar section which is laid with 411-lb, steel rails.

Bullast .- The whole line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing .- The main line is fenced.

Curves.—The sharpest curve is of 900 feet radius.

Gradients .- The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper.

#### Terms of contracts-

The Bengal and North-Western and Tirhoot railways are worked under the following contracts :-Contracts of-12th Docember 1882, -- Bengal and North-Western Railway Company's principal contract.

22nd February 1886 .- Contract modifying that of 1882.

19th December 1891.—Contract, supplemental to those of 1882 and 1886, providing for the Revelganj,
Bahranghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway, and for the exercise of running powers over the

Cawnpore-Burhwal (3' 3\section gauge) link.
23rd July 1896.—Contract, supplemental to those of 1882, 1886 and 1894, providing for the Ganges-Gogra Doah lines of the Company's railway, known as the Ganges-Gogra Doab contract.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

21th April 1903 .- Supplemental contract regarding rate of exchange.

14th December 1905.—Contract, supplemental to that of 1852, regarding the date on which the Secretary of State may exercise his right to purchase the Company's line and the period at which he may fix the purchase price, and revising the terms on which the Tirhoot railway will continue to be worked by the Bengal and North Western Railway Company after the expiration, on the 31st December 1904, of the contract of 1890.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 12 Sub-heads (a) & (b) · BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.

12 (a) Bengal and North-Western railway proper (3' 33" gauge)—concld.

Terms of contracts-concld.

The general conditions of the contracts are as follows :-

Government aid .- Land alone was provided free.

Currency of contracts.—(1) Bongal and North-Western railway contracts.—The contracts of 1882, 1986 and 1894, viz., those for the working of the Bengal and North-Western railway proper terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, movable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932, on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government would have been entitled under the contract of 12th December 1382) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice, if the Company fails to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of line and fixed machinery and plant, less value of latter treated as a reversionary sum absolutely payable on the 31st December 1981.

(2) Ganges-Gogra Doab contract.—The contract of 1896, \*iz., that covering the Ganges-Gogra Doab lines, runs

concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903; but, in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line, as

shown in sterling, appearing in the capital account.

Nors.—Government reliquished their tight to acquire the Company's line on the 31st. December 1912, on the condition that they shall have the power to fix in 1912 the purchase price of the Bengal and North-Western railway and to parchase the line at that price on the 31st.

Tirhoot railway contract.—The contract of 1890, for working the Tirhoot railway, terminated on the 31st December 1904, and the revised contract under which the railway continues to be worked by the Company came into force on and from the 1st January 1905 and is current until the 31st December 1932, subject to the provise that the Scoretary of State may, if he should think it desirable, terminate it in 1919 or modify it at that date in such manner as he may think fit.

Power of Company to surrender contracts,-Nil.

Terms of working .- The gross carnings of the State and Company's sections to be kept entirely separate.

All charges for maintenance of way, works and stations, other than those for general supervision, to be allocated to each section on the basis of actual outlay on that section, all other working exposes being divided between the two

sections in proportion to the gross earnings of each.

4 per cent, on respective outlay on "rolling stock," "steamers, barges and landing stages," "stores," "station, station machinery and staff quarters at Sonepore" for "joint use," and future expenditure on "workshops," to be charged to working expenses in addition to ordinary working expenses and contribution to Provident Fund, for apportionment to the State and Company's sections, in the ratio of their respective gross carnings. This amount of interest to be credited to the respective Revenue Accounts in the ratio of contributions of capital to the joint accounts.

Government to first receive out of the Tirhoot railway net earnings of each year 5 per cent, on all capital expended

on the Tirhoot line open for traffic, including expenditure subsequent to 31st December 1904.

The residue of not carnings to be dealt with as follows:—

(a) if the residue does not exceed ten lakhs, 4ths to Government and 4th to the Company;

(b) if the residue exceeds 10 lakhs, the sum of 10 lakhs shall be divided as in condition (a) and the excess over 10 lakes shall belong 14ths to Government and 15th to the Company.

Rates and fares. On the Company's section the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section certain maxima and minima have been fixed, within which the Company is permitted to vary

Statistics of working--

			TAPLE I.				Tacted Including the railway fr	e Tirhoot
Calendar year.	Cupital outlay to and of each year.	Gross carnings.	Nat carnings.	Payments received for working the Tirhoot Railway.	Tetal	Foresatings en en ital enthry.	Eirnings per mile per week.	Proportion of expenses to carrings
	· Ra.	Rs.	Re.	R <sub>H</sub> .	Rs.	1	Rs	
896	1,52,47,428 201,66,940 2,36,16,102 2,56,22,684 2,61,51,593 2,63,41,872 2,57,91,904 2,76,98,842 2,83,88,821 2,83,88,821 2,83,88,821 4,84,834 4,103,207 4,66,75,823 5,14,73,119 5,50,91,630 5,84,83,92,183	77,470 12,05,320 18,51,074 19,44,002 22,09,543 22,11,624 22,18,615 24,76,009 21,89,077 26,14,510 26,17,242 26,71,036 26,26,003 27,55,718 38,31,800 44,46,861 44,56,593 55,66,794 55,00,338 61,93,433 67,16,933	100 100 100 100 100 100 100 100 100 100	72 m oqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	-26,221 6,10,790 8,29,150 8,37,044 12,32,307 16,25,193 17,61,254 16,48,762 17,67,673 17,41,786 17,91,152 20,50,805 27,32,861 77,28,906 91,74,225 10,40,834 44,45,930	5 15 5 7 8 4 7 8 4 7 8 4 7 8 4 7 8 4 7 8 4 7 8 4 7 8 5 7 4 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	27 72 106 90 102 103 121 121 120 123 133 131 128 129 140 154 161	13.1-74 49 32 66:36 56:34 55:25 52 35 44:08 40:04 41:13 43:20 41:79 42:45 47:97 43:78 40:07 44:45 47:97 44:45 47:97 48:78
905	6,77,55,566 7,18,66,023	61,79,116 77,02,976	34,72,017 40,92,699	1.69,446 1,92,032	06,41,163 42,81,781	5 37 6 00	151 168	43·1 47·3

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# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head 12}}{\text{Sub-heads }(a) \cdot \mathbf{a} \cdot (b)}$ . BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—concld.

12 (6) Tirhoot railway (3' 33" gauge)-

Details of construction -

The open mileage of this railway is 614:30 miles, consisting of (1) main line (Semaria Ghat to Bettiah and Samastipur to Khanwa Ghat), 242 58 miles, and (2) branches, 371 72 miles. Of the above 9 47 miles are double line. First sanction to the construction of the main line was accorded in 1871 and it was opened throughout in 1890. There were in addition 161-06 miles under construction.

Permanent-way — The following types of rails are in use: —50-lb. flat-footed steel, 41½-lb. flat-footed steel and 60-lb. iron. The sleepers are of sal, pyinkado, jarrah and cast iron of Denham-Olpherts' pattern.

Ballast.—The line, except quite new constructions, is ballasted with knokur or broken brick.

\*\*Feeding.—The main line is fenced with stone posts and 4 wires.

Curves.—The sharpest curve, which is on the main line, is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3:42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

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Terms of contracts-See under Bengal and North-Western railway proper, 12 (a).

Statistics of working-

			TA	льж 1.					TAR	lk II.	
Calen- dar year.	Capital outlay to end of each year.	Gross earnings.	Net carmings.	Pryment made to the Bengal and North-West- ern Rulway Company for working the line.	Total income	Percent- age of total in- come on capital outlay.	Iuterest.	Gain or loss to the State.	Earnings por mile per week.	Proportion of expenses to ournings.	Remarks.
	Rs.	Rн,	R4.	R4.	Rs.		Rs.	Rs.	Ra.		
875		•••		,	•••				39	107:62	
1876 . 1877 .	•••	•••	غ ا	a					71	68:67	
1877 . 1878 .			4	ā			•••	•••	77 108	69·85 75·34	
1978 . 1979 .	59,38,320	4,58,733	Information not symbolic	Information not available	1,07,519	202	2,37, 111	-1,29,592	113	76.49	
1880 .	56,13,274	5,51,068	, s	ot n	2.33,6-2	4.16	2,50,659	16,997	102	56-40	
1881 . 1882 .	72,02,017	5,41,255	ă	ŭ	2,36,200	3.28	2,67,245	-31,015	110	59.57	
1883	1,07,92,877	6,60,022 8,92,141	6	g	2,54,047 2,50,705	2:38 1:96	3.86,612 4,90,014	-1,82,565 -2,39,309	186 103	61·50 70·00	
1984	1,48,84,982	11,00.073	Bat	nad	2,66,532	1.79	5,74,369	-3,07,787	105	77.60	
1885 ,	1,14,17,916	12,78,634	for	for	3,59,289	2.49	5,36,195	-2,26,926	98	71.90	
189G .	1,54,33,549	11,94,634	4	H.	5,01,189	3.25	6,30,944	-1,29,755	100	66.26	
1887 . 1858 .	1,97,49,195 2,07,78 252	17,22,955 18,07,283	ł		6,95,725 7,98,875	3.52	7,79,801	84,076	122	59 62	
1889 .	2,12,23,091	18,96,674			9,78,216	3.85 4.61	8,17,485 8,41,932	-18,610 +1,36,314	123 127	55 80 48 42	
									and Nort	with Bengul h-Western lway	
1890 .	2,29,94,165	23,92,977	i		13,21,797	5.75	9,14,207 9,34 385	+ 4,07,590	"		
1891 .	2,34,99,145 2,43,25 804	21,80,270	14,23,332	69,484 67,660	13,55,818	5.76	9,34 385	+ 4,19,463 + 5,65,790		· •••	
1992 . 1893 .	2,49,05,8 3	21,94,862 26,81,100	13,82,875	66,842	13,15,815 10,13,103	5·41 5·39	9,50,025 10,01,205	+3,11,928		•••	
1894 .	<b>\$2,50,08,061</b>	29,42,365	15,35,581	72,358	11,63,223	5.85	9,98,383	+ 4,64,835	:::		
1895 .	2,56,02,092	30,80,611	15,61,276	72,969	11,88,367	5-81	10,18,013	+ 4,70,351			
1896	2,60,38,655	31,61,172	15,56,944	71,614	11,85,320	5.70	10,27,821	+ 4,57,509		•••	
1897 1898	3,11,00,098 3,46,13,176	32,38,109 31,13,130	16,29,812 16,67,068	74,905 75,885	15,51,907 15,91,183	5.00 1.39	10,33,630 13,18,761	+ 5,16,277 + 2,72,119			
1899	3,80,27,533	31,21,408	14,42,101	61,910	13,80,161	3.63	14,62,603	- 82,142	:::	:::	
1000 .	4 30,15,219	36,47,197	15,66,413	49,563	15,16,8:0	3.23	16,19,291	1,02,381			
1001 .	4,61,91,293	43,16,760	22,75,660	76,853	21,93,507	4.76	17,67,799	+ 1,31,008		:::	
1902 .	4,91,41,200	45,50,632	24,55,201	76,671	22,78,530	481	18,77,205	+ 5,01,325	:::		Includes 8
. 609	5.08 62,468	56,72,952	81,92,619	1,04,369	30,88,250	6.07	19,86,515	+ 11,01,735			gauli-Raza branch fr
1001 .	5,64,95,579	62,63,114	34,98 567	1,16,854	33,81,733	5.99	21,48,021	+12,33,712			11th Ap
1905 . 1906 .	6,21,36,962 6,73,40,339	61,81,754 66,80,324	35,57,423	1,69,446 1,92,032	33,87,977	5.45 5.50	23,54,563	+10,88,414			1904.

Sagauli-Raxaul branch, before it was purchased by the State.

											TABLE I.				TABLE	II.
,,,,,,,			C	alen	dur 3	rear.					Capital outlay to end of each year.	Gross carnings.	Net earnings.	Percentage on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
											Re.	Rs.	Rs.		Rs.	
1896 1897 1898	:	:	:	:	:	:	:	•	:		1,26,044 6,68,783 8,07,550	<b>.</b>	•••	 		*** ***
1899	:	:	:	•		:	:	• 5	:		10,81,740	5,488	Credited to		90	40.00
1900 1901	.:	:	:				:	:	:	•	12,12,073 10,67,014	25,830 37,192	) capital. 13,593	1.27	\$0 40	52·62 63·44
1902	up to	. ia41	• • • • •	en	•		:	:		:	11,78,421 11,16,252 11,16,352	39,296 43,809 18,740	18,638 18,571 10,114	1.74 1.66 0.91	40 42 81 74	52:57 57:61 46:08
	/up or	, 4001	· Al			•	•	#	•	•	Amalgamated	with the Tirhoo	t milway from	11th April 1904.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2000

# History of railways constructed and in progress.

[For Index see page 112.]

Number  $\frac{\text{Main head 13}}{\text{Sub-heads }(a) \text{ & }(b)}$ . BENGAL DOOARS RAILWAY SYSTEM—

Chairman—Colonel A. J. Filgate, R.E.
Secretary—H. Rendel, Esq.

Offices-271 Winchester House, 50, Old Broad Street, London, E. C.

# Lines comprising the system-The Bengal Docars railway system is made up of-

									-	Miles.
(a) Bengal Dooars railway (3' 3\frac{1}{2}" gauge)										86.46,
(b) Bengal Dooars railway extensions (3'32"	gange;	•							•	116.56
•	•									
							T	otal	•	152.9

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

# 13 (a) Bengal Dooars railway proper (3' 3\square\" gauge)-

#### Details of construction-

The total length of open mileage is 36:40 miles, divided into main line (East Bank Teesta to Dam Dim), 31 miles, and branch, 5:40 miles. Construction was sanctioned in 1891 and the line was opened through in 1893.

Permanent-way .- The line is laid with \$11-lb. flat-footed steel rails on sal sleepers.

Ballast.-The line is ballasted throughout with stone.

Fencing .- The line is unfenced.

Curves. - The sharpest curve is of 1,432:50 feet radius.

Gradients.—The ruling gradient is 1 in 166.

#### Terms of contracts-

The Bengal Dooars railway and the extensions are worked under the following contracts:-

Contracts of-27th April 1891 .- Bengal Docars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Mal-Madaribat extension).

The general conditions of the contracts are as follows:-

Government aid.—Land free of cost from Government; and, from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of soven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preciding five years, but not exceeding by more than 20 per cent, the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If, at any period, the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company the whole of the profits go to the Company. If worked by the Eastern Bengal (State) tailway the Secretary of State retains in each half-year 10 per cent, of the gross earnings, the remaining 60 per cent, being paid to the Company after deduction of the income-tax payable to Government.

#### Rates and fares-

Bengal Doours railway and extensions from Mal to Madarihat and Dam Dim to Bagrahote--

Certain maxima and minima have been fixed subject to alteration from time to time. If the gross receipts reach 12 per cent. on the capital, Government may reduce maxima to the extent of 25 per cent., except in the case of certain special rates.

Extension from Barnes Junction to Lalmanirhat-

Certain maxima and minima have been fixed within which rates may be varied.

Open line.

# History of railways constructed and in progress. [For Index see page 112.]

Number Sub-heads (a) and (b). BENGAL DOOARS RAILWAY SYSTEM—concld.

13 (a) Bengal Dooars railway proper (3' 3\frac{3}{8}" gauge)—concld.

Statistics of working-

							TABL	E I.				TABI	e II.
	Calono	lar y	ear.		Capital outlay to end of each year.	Gross carnings.	Net carnings.	Percentage on capital outlay	Subsidy from District Board.	Total	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
					Ra.	R4.	Rs.		Rs.	Rs.	-	Rs.	
1891 1892	•	٠	•	•	16,479 12,67,626	•••							•••
1893	•	•	•	•	10.40.001	1,14,812	57,639	3.12		***			.,,
1894	•	•	•	• ;	22,81, 21	2,05,286		4:57	1000	57,639	3.12	69	49.80
1895	•	•	:		23,26,476	2,53,537	1,07,155	5:48	1,000	6 1,08,291	4.74	109	49.20
1000	•	•	•	•	,,	1,00,001	1,51,81.3		, ,,,,,	1,31,458	5.62	125	49.73
1896				. :	24,33,213	2,70,450	1,31,813	5:42	!	1,31,813	5:42		
1897					26,50,713	2,86,107	1,45,299	5:18	' '''	1,15,289	5.18	136	61.26
1898					26,68,050	2,69,030	1,10,620	4:15	4.0 0	1,14,620	4:30	145	49.27
1699				• '	26,26,748	2,73,037	1,14,416	4:51		1,18,116	4.21	135 137	57:40
1900				• :	26,42,695	2,12,731	1,89,461	7.17		1,89,161	7 17	168	55.41
				1			•			-,,	• • • • • • • • • • • • • • • • • • • •	100	43.06
1901		:	•	•	26.11,873	3,10,920	1.76.390	6 67		1,76,299	6 67	156	48.27
1902		:		٠,		2,73,310	1,71,155	6:47	1	1,71,455	6.47	144	37.27
1903	•	•		•	26,95,547	3 09 965	$2\ 23\ 786$	R 30)	1	2,23,786	8 30	156	27.80
1904			•	• '		3,16,277	2,56,651	. 963	l i	2,56,651	9.63	175	25.88
1905	•	•		•	27,26.891	3,70,343	2,49,504	915		2,19,598	9.15	196	32.60
1000					W7 7" 000	4 00 000							02 00
1906	•	•	•	٠,	27,31,098	4,08,623	2,96,703	10 86	;	2,96,703	10.86	216	27:38

# 13 (b) Bengal Dooars railway extensions (3' 34" gauge)—

#### Details of construction-

The total open unlerge of the extensions is 116 56 miles, comprised of (1) Eastern extension (Mal to Madarihat), 44 miles, (2) Southern extension (Barnes junction to Lahmanirhat), 65:80 miles, and (3) Western extension (Dam Dim to Bagrakote), 6:76 miles. The construction of the extensions was sanctioned in 1898 and they were opened in 1903, 1900 and 1902, respectively.

Permanent-way.—The line has been laid with \$11-ib that-footed steel rails on sal sleepers.

Bullast .- The line is ballasted throughout with stone.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients. - The ruling gradient of the Southern extension is I in 200 and of the Eastern and Western extensions, 1 in 100.

Terms of contracts. - See under Bengal Docars railway proper, 13 (a).

Statistics of working-

							 'ا	486	я l.				TABLE	II.
17-30-30-3		C	alond	lar 30	rar.				Capital outlay to end of cach year.	Gross carnings.	Net curnings.	Per cont. on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906	 				:		 		Rs. 73,151 4.03,611 26,7-,455 47,11,632 62,26,567 72,66,166 75,30,175 84,97,571 87,92,080 80,99,516	16,191 1,76,399 2,52,631 3,47,832 4,15,179 5,12,343 5,83,852	86,266	   0·11 1·11 1·29 1·31 1·24 2·25 3·23	Rs  13 47 62 71 68 85 96	72-31 69-92 65-99 69-55 73-85 61-30 50-11

# Number sub-heads (a) to (d) ... BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM— Lines comprising the system .- The Bhavnagar-Gondal-Junagad-Perbandar railway system is made up of-

																		•	Open line, Milea
(a) Bhavnagar-Gondal-Junaga	id-Po	rhan	da <b>r</b> r	ailway	(3' 34" gauge)	•	•		•	•		•		•	•				384.19
(b) Dhrangadra railway .		•	•		(3, 2%, Sanke)	•	•	•		•	•					•			20.83
(c) Jamuager railway	•	•	•	•	(4 34" cauge)	•	•	•	•	•	•	•	•		•	•	•		
(d) Jotalsar-Rajkot railway	•	•	•	•	(3, 3%, gange)	•	•	•	•	•	•	•	•	•	•	•	•	•	46.21
															Tr.	4.1			AFFIAF

# 14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 33" gauge)-

This line was constructed by Government agency, and is owned and worked by the Native States after which it is named.

#### Details of construction-

The line is 334'19 miles long. It consists of the following sections, (!) Bhavnagar to Wadhwan, 105'03 miles, (2) Dhola to Porbandar Baudar, 159'51 miles, and (3) Jetalsar to Vernval Bandar, 69'65 miles. Sanction to the construction of the first section was given in 1879, to the second section in 1879 and 1888, and they were opened through in 1880 and 1889, respectively. The third section was sanctioned in 1886 and opened through in 1890.

History of railways constructed and in progress. [For Index see page 112.]

Main head 14 Number Sub-heads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—contd.

14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (8' 3%" gauge) -concld.

Details of construction—concid.

Permanent-way.—The permanent-way consists of 411-b. flat-feoted steel rails on creosoted pine and deedar sleepers, except on the Dhoraji-Porbandar section, where the rails are laid on steel pea-pod sleepers.

Ballast.-The line is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan which is ballasted with kunkur.

Fencing .- The line is practically unfenced.

Curves. - The sharpest curve is of 1,200 feet radius.

Gradients .- The ruling gradient is 1 in 200, except on the Jetalsar-Veraval section, where it is 1 in 150.

Terms of contract-

The railway is worked under the following agreement:—

Agreement of—28th November 1896, having effect from the 1st January 1897 (between the several proprietary States) for management and working by a Board of Control.

The general conditions of the agreement are as follows :-

Government aid .- Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. to be President, and one nominee from each of the proprietary States of Diavnagar, Gondal, Junagad and Formandar. The existing lines owned by those States are separately and entirely described as the "Integral railways," and their combination is terined the "Open system." The decisions of the Board of Control are based on the majority of "Members' single votes" and "Proprietary votes" recorded. "Members' single votes" prevail at special meetings, where each member has one vote; while "Proprietary votes," i.e., votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the agreement is from the 1st January 1897 to the 31st December 1900.

Until a new agreement is adopted the terms of this agreement remain in force.

Power of Board to determine agreement .- By unanimous vote the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st

December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working .- The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the capital and revenue expenditure is wholly borne by the same. All expenditure on the open railways, and on the integral railways as may require apportionment is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, and is secured against all such disbursements by the payment into the Bhavnagar State Treasury of all receipts of the entire open system. All funds for major capital works are provided by the integral railway concerned, or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Rates and fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any

integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

Statistics of working-

											TABLE 1.				TAB	LE II.
				Caler	da <b>r</b>	year.					Capital outlay to end of each year.	Grosa енгинда.	Net earnings.	Per cent, on capital outlay.	Farnings per mile per week.	Proportion of expenses to earnings.
											Rs.	R9.	Rs.		Ra.	
879	•	•	•	•	•	•	•	•	•	•	4,80,177 49,19,304		••		•••	
880	•	•	•	•	•	•	•	•	•	•	49,19,304	•••	•••			•••
681											74,46,353	6,88,385	2,31,706	3-11	78	70-19
382	•	•	•	•	•	•	•	•	•	·	86,75,711	8,76,836	3,51,619	4:09	87	70·19 59·55
883	•	•	•	•	•	•	•	•	:		90,40,232	8,94,179	3,26,513	3.61	89	63.47
684	•	•	•	•	•	•	•	•	•	•	92,92,040	10,92,312	4,98,107	5:36	109	54.46
685	•	•	•	•	•	•	•	•	•	•	96,25,031	10,04,660	3,91,217	4.07	98	59.55
000	•	•	•	•	•	•	•	•	•	•	1		0,01,021	1	3.,	38 93
986									•		98.57,553	9,65,379	4.15,149	4.21	96	57:00
887	-		-								1,08,28,023	9,80,827	4.42,103	4.08	98	54-93
888	·	·									1,30,63,663	11,20,260	5,06,545	3.88	109	50.58
889	٠.	•		-							1,62,60,477	13,80,417	7,01,177	4.33	97	56.55
890	·	·									1,68,42,051	15,71,788	6,00,267	3.26	9i	61.61
											1 77 04 773	74 55 000	4 57 504	0.70		
891	•	•	•	•	•	•	•	•	•	•	1,71,21,771	14,77,263	4,75,786	2.78	85	67.79
892	•	•	•	•	•	•	•	•	•	•	1,72,52,030	15,78,178	4,37,876	2:54	91	72.25
893	•	•	•	•	•	•	•	•	•	•	1,72,28,860	20,63,104	8,88,708	5.16	119	56.32
894	•	•	•	•	•	•	•	•	•	•	1,73,65,592	18,40,287	7,91,335	4:56	106	49.61
895	•	•	•	•	•	•	•	•	•	•	1,76,00,032	19,52,221	8,21,220	4.67	113	57.93
896		_	_	_			_				1,75,68,395	19,80,878	9,89,274	5.63	114	50.06
897	:	•	-	•	-	-	•	•	-	·	1,76,53,652	19,21,640	8,19,081	4.64	105	55.04
898	:	•	-		-	·					1,78,56,546	16,98,657	7,09,781	3.98	97	58.22
899	•	:	:	:	•		·			·	1,79,56,272	18,53,483	9,26,935	5:16	107	49.99
900	٠.	•									1,80,00,616	19,53,565	10,10,773	5.63	113	48.27
	•	-			-									1 1	,	
901				•		٠.					1,80,96,671	15,37,378	6,80,089	3.76	89	35-76
002				•			•		•		1,80,87,538	13,71,837	5,68,842	3 13	79	58.72
908	٠	•	•	•	•	٠		•	•	•	1,81,58,814	16,04,638	8,36,670	4.61	92	47.86
904				•							1,80,44,250	18,60,565	10,39,916	5.76	107	44.11
905	•	•	•	•	•	4	•		•	•	1,80,09,429	18,51,324	9,90,981	5.20	106	46.47
												******	44 44 444			
906		•	•	•	•	•	•		•	•	1,81,74,947	19,57,290	11,07,581	6 09	113	43.41

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 11 Sub-hads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—contd.

# 14 (b) Dhrangadra railway (3' 3%" gauge)-

This line was constructed for the Dhrangadra State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

#### Details of construction-

The line is 20:83 miles long and connects Wadhwan with Dhrangadra. Its construction was sanctioned in 1897 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 414-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast used is of broken sand-stone.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 1,400 feet radius.

Gradients.—The ruling gradient is 1 in 175.

#### Terms of contract-

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an Agreement—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are as follows:-

Government aid .- Nil.

Currency of agreement.—The agreement shall hold good so long as the working agreement of the Bhavnagar-Gondal-Junagad-Porbandar railway, dated the 28th November 1896, is in force.

Terms of working.—Forty per cent. of gross earnings (subject to a biennial revision) p'us 5 per cent. for hire of rolling stock and in addition, actual expenditure on the maintenance of Way. Works and Stations.

Rates and fares. - The same rates and fares is are applicable to the Bhavnigur-Gondal-Jung id-Porbandar railway.

#### Statistics of working-

											TABLE 1.				TAB	LR II.
				Cale	ndar	sear.					Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Earnings por mile per week,	Proportion of expenses to earnings.
											Re.	Ra.	Ra,		Ra.	
1897 1898 1899 1900	:	:	:	:	:	:	:	:	:		5,830 5,03,589 6,06,104 5,86,534	23,395 63,876 <b>57,</b> 366	10,617 20,978 18,984	179 346 321	 37 59 53	54·62 67·16 66·91
1901 1902 1903 1904 1905	:	:. :	• :	:	:	:	:	:	:	•	5,86,100 5,85,011 5,86,638 5,7,116 5,66,695	46,196 37,731 43,053 47,516 49,042	11,765 8,075 11,713 15,446 13,575	2:01 1:08 1:09 2:63 2:28	43 35 40 44 45	74-53 78-60 72-80 67-49 72-73
1906									•		5,86,791	65,121	25,707	4 35	<b>6</b> 0	60-52

## 14 (a) Jamnagar railway (3' 34" gauge)-

This line was constructed for the Navanagar State by the Bhavnagar-Gendal-Junagad-Porbandar railway by which it is being worked.

# Details of construction-

The railway is 5 P22 miles long and connects Rajkot with Bedi Banlar. Its construction was sanctioned in 1893 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 411-lb. float-footed steel rails on crossoted pine and deodar sleepers.

Ballast.—The ballast used is of broken stone.

Beneing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves .- The sharpest curve is of 1,000 feet radius.

Gradients .- The ruling gradient is 1 in 200.

### Terms of contract-

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an Agreement—baving effect from the date on which the line was opened to traffic.

The general conditions of the agreement are the same as apply to the Dhrangalra railway, [14) (b)] except as follows:—

Terms of working.—\*Forty per cent. of gross earnings (subject to a biennial revision), plus actual expenditure on the \*Reduced with effect from the 1st July 1:06 to 35 per cent. in half-years when the earnings per mile per week exceed Rs. 50.

maintenance of way, works and stations; the locomotives and rolling stock being supplied by the proprietary State.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 14 Sub-heads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—concld.

14 (c) Jamnagar railway (3' 3% gauge)-concld.

Satistics of working-

												T	ABLE I.	0	TABI	Lu II,
	<b></b> -			Cal	ondar	year		¥			Capital outlay to end of cach year.	Gross carnings.	Not earnings.	Per cent, on capital ontlay.	E-mings per tule per week	Proportion of expenses to earnings.
•											Rs.	Rs.	Rs.		Rs.	
1891 1895	:	:	:	:	:	:	:	:	:	:	15,000 62,956	:::	•••		:::	•••
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	14,91,727 22,50,533 20,18,196 25,(8,558 28,(9,481	81,456 1,02,045 1,26,023 1,49,453	28 954 31,782 51,540 59,540	1 29 1 57 2 23 2 58	 41 36 45 53	65:73 69:12 59:20 60:09
901 902 903 904 905	:	:	:	:	:	:	:	:	:		28,09,969 23,54,210 20,18,338 23,27,281 23,27,105	1,36,314 1,31,164 1,39,756 1,41,650 1,48,341	51 (0) 53,751 60 197 56,721 62 068	2:92 2:48 2:55 2:14 2:66	48 46 50 FO 53	62:29 50:00 56:98 50:78 88:20
906											27 26,826	1,51,735	(0,076	2 58	54	60:30

#### 14 (d) Jetalsar-Rajkot railway (3' 33" gauge)-

This line was constructed for the Jetalsar-Rajkot Railway Syndicate by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

#### Detail of construction --

This line is 46:21 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 414-lb. flat-footed steel rails on ercosoted pine sleepers, except for five miles where the rai's are laid on steel trough sleepers.

Ballast .- The ballast used is of broken stone.

Fencing .- The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—The sharpest curve is of 955 feet radius.

Gradients .- The ruling gradient is 1 in 200.

#### Torms of contract\_

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an agreement-having effect from the date on which the line was epened to traffic.

The general conditions of the agreement are the same as apply to the Dhrangadra railway [11 (b)] except as follows :-

Terms of working .- \* Forty per cont. of gross carnings (subject to a bicanial revision), plus actual expenditure on maintenance of way, works and stations; the beometives

Reduced with effect from 1st January 1907 to 35 per cent. in bulf-years when the earnings per unle per week exceed Es 50.

† The Proprietary State not having supplied the becometives and rolling stock a farther deduction of 5 per cent from gross cautings is made as hite for stock. and rolling stock to be † surplied by the Preprietary State.

# Statistics of working-

												Тави	е I.		TARE	ь П.
				Calei	dar ;	yoar.					Capital ontlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay	Errings per mile per weck,	Proportion of expenses to extenses.
1892											R4	Ra.	Rs.	· · - · · · · · · · · · - ·	Re	
1893	•	:	•	•	•	:	•	•	•	:	7,89,792 14,35,593	09,006	***			•••
1894	:	:	·		•	Ĭ	·	•		•	14,99,605		50,826	3:55	59	50:59
1895				·	·		•	:		•	18,03,585	1,55,556 1,83,388	61,152	4.08	65	60 68
			-	•	•	•	•		•	•	21,111,000	מפנייניים נ	77,113	8.12	76	57.70
1806											15,29,265	1,97,116	84,239			
1897		•								•	15,47,463	2,05, 13	84,120	5//1	82 1	57'26
18:8					•						35,78,017	1,71,911	76,057	5:47 4:82	85	58.72
1899			•	•				-			15,83,208	1,9×,127	75,726		. 74	57.50
1900	•										15,74,082	2,02,718		4.97	83	69:13
						-				-	24,14,72	2,01,110	86,214	2.44	. 84	57:17
1901			•								15,74,039	1,76,383	C- UF1		- 1	
1902				•							15,78,593	1,41,317	67,251 54 485	4 27	7.3	61 67
1903									-		15,78,658	1,66,104		8-15	60	62:25
1904										- 11	15 74,655	1 100 100	63,230	4.01	69	82°00
1905									-	- 1	15,80,207	1,88,139	€9. 48	4:39	79	¢3 25
					-	•	-	•	•	. 1	20,00,201	1,91,1.5	71,8 2	4.74	80	60.88
1906										. 1	15,82,472	1,83 261	A. A.A			
									-	- 1	,50,510	1,01 201	65 658	4.12	76	6:18

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 15 Sub-heads (a) & (b)

#### BURMA RAILWAYS SYSTEM-

Chairman.—Sir Auckland Colvin, K.C.S.I., K.C.M.G., C.I.E. Managing Director.—Lieutenant Colonel Alfred Glynn Bogbie, R.E. Offices.—199, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Burma railways system is made up of-

								Opon line.	Or sanctioned for	Total.
(a) Burma railways (3' 3}" gauge)								Miles.	coustruction. Miles. 72:95	Milose 1.413-10
(b) Burma railways extensions (3' 31" gauge)	:	:	:	:	÷	:	:		186 93	186.93
					Tot	al		1 340 15	250.88	1,600.03

#### 15 (a) Burma railways proper (3' 3%" gauge)—

The Burma Railways Company was formed in 1896 for the pyrpose of taking over the working of the then existing system of State railways (3' 3\frac{3}{3}'' gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rang-on to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Details of construction—

The open mileage of the Burma railways, 1,340:15 miles, consists of (1) Main line section, main line (Rangoon to Mandalay), 386 miles, branches, 81:60 miles; (2) Irrawaldy section (Rangoon to Prome), 161 miles; (3) Mu Falley section, main line (Sagaing to Myitkyina), 331:29 miles; branches, 91:46 miles; (4) Mandalay-Kunloon section (Myohaung to Lashio), 177:84 miles, and (5) Bassein-Henzada-Lelpadan section, 110:96 miles. Of the above 23:80 miles are double line.

First sanction to the construction was given in 1871; and the first three sections were opened through in 1889, 1877 and 1898, respectively, and the last two sections in 1903.

Besides the above 72.95 miles were sanctioned for construction, viz. (1) from Thumaing to Malagaon, 6.70 miles, and (2) from Neikban to Begayet, 66.25 miles. Work on (1) has not yet been commenced while that on (2) has been suspended.

Permanent-way.—The rails in use on the system are 60-1b, 50-lb, and 414-lb, flat-footed steel. The sleepers throughout are generally of teak, pyinma and pyinkado, the last named largely predominating.

Ballast.—The ballast used is either shingle or broken stone.

Fencing.—The main line, the Irrawadly line and the Bassein-Henzada line are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced.

Carres.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet on the Rangoon-Prome section of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Meiktila-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively; on the Lashio branch of 337 feet; on the Mu Valley line, the Katha branch and the Nankan-Mohnyin section of 573 feet.

Gradients.—The rading gradient on the main line is 1 in 200, uncompensated; on the Lashio branch it is 1 in 25, compensated; on the Mu Valley line 1 in 60, uncompensated; on the Myingyan branch, 1 in 100, uncompensated; on the Sagaing-Alon branch, 1 in 150, uncompensated, and on the Katha branch, 1 in 50, compensated.

#### Torms of contract-

The railways are worked under the following contract :-

Contract of-9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

The general conditions of the contract are as follows :-

Government aid,-Interest is guaranteed at 2½ per cent, on the Company's share capital. Land was provided free.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to sucrender contract .- Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of

(1) the equivalent of the interest paid for the half-year on any debentures issued by the Company;

(2) the equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital ruised by the Company;

(3) the equivalent of interest at  $2\frac{1}{3}$  per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government.

After payment of the interest above mentioned, any surplus which may remain unpaid in a year ending on the 30th June to be divided between Government and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

History of railways constructed and in progress. [For Index see page 112.]

Number Main head 15 Sub-heads (a) and (b). BURMA RAILWAYS SYSTEM—concld.

15. (a) Burma railways proper (3' 33" gauge)—concld.

Statistics of working-

										TABLE I.				TAB	LE II.
		Cale	ndar	year			Capital outlay to ond of weach year.	Gross earnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Company's share of not earnings,*	Gain or loss to the State	Earnings per mile per week.	Proportion of expenses to earnings.
							Rs.	Rs.	Rs.		Ra.	Rs.	Re.	Rs.	
1877 1878 1879 1880	:	:	:	:	:		1,22,86,507 1,25,97,310	9,55,019 10,22,#10	 1,41,713 5,21,685	 1:34 4:11	5,17,188 5,62,331	 	-4,05,695 -41,216	61 115 114 138	129'36 93'03 85'17 60'60
1881 1882 1883 1884 1885	:	:	:	:	:		1,36,51,992 1,78,39,222 2,19,77,689 2,56,37,089 2,72,85,343	15,43,622 15,75,691 15,62,586 21,05,421 21,63,656	6,15,077 6,30,430 5,60,766 8,21,036 4,73,123	4·73 3·53 2·55 3·21 1·73	5,86,210 6,23,969 7,46,968 9,69,215 10,61,184		+58,867 +6,161 -1,85,302 -1,47,279 -5,88,061	184 188 187 181 143	58·21 59·99 64·66 60·96 73·18
1886 1887 1888 1889 1890	:	:	:	:	:		2,88,52,604 3,66,52,847 4,83,73,677 5,12,49,158 5,56,22,296	26,57,955 83,21,263 33,76,218 46,90,263 54,71,432	9,41,149 15,58,803 12,71,060 15,73,552 23,48,191	3·26 4·25 2·63 3·07 4·23	12,64,242 13,15,249 18,18,560 20,17,224 21 <del>4</del> 65,808		+3,23,093 +2,43,054 -5,46,000 -4,43,672 +2,12,863	158 193 171 169 210	64-51 53-12 62-33 66-45 57-08
1891 1692 1893 1894 1895		:	:	:	:		6,03,31,289 6,64,02,875 7,03,47,005 7,37,14,721 7,57,23,659	53,55,197 71,00,613 67,22,506 62,87,354 e7,11,062	23,71,392 33,86,044 22,42,493 23,23,328 27,92,356	0:90 5:10 3:19 3:15 3:57	23,23,237 24,90,221 27,19,995 28,94,375 30,01,163	=======================================	+43,105 +8,95,867 -4,77,503 -5,71,047 -2,98,807	199 237 178 161 160	59·50 52·31 66·64 63·05 59·73
1896 1897 1898 1899 1900	:	:	:	:	:		8 13,44,229 8,73,31,890 9,24,98,509 10,11,17,647 11,83,96,635	76,08,558 86,76,403 89,91,451 88,25,724 1,10,29,947	29,85,751 38,82,673 37,83,523 35,78,407 48,94,824	3:67 4:45 4:16 3:54 4:13	31,43,442 08,31,674 39,49,899 38,35,209 38,49,026	1,63,877 1,61,076 1,24,994 3,47,606	-4,57,691 -1,11,878 -3,22,452 -3,81,796 +6,98,192	167 158 184 179 195	60·76 55·25 57·87 59·45 53·62
1901 1902 1903 1904 1905	:	:	:	:	:	•	11,09,22,408 12,70,23,590 10,01,80,277 13,38,28,678 13,55,91,056	1,18,85,329 1,25,02,671 1,36,14,478 1,51,02,418 1,57,75,957	49,89,676 52,72,683 52,19,322 65,70,760 61,81,063	4:18 4:66 4:61 4:92 4:56	40,41,108 43,94,423 44,06,500 44,71,208 45,35,974	4,42,439 4,69,365 4,32,246 5,92,997 6,77,542	+ 5,06,109 + 4,08,495 + 3,80,576 + 15,06,495 + 9,67,547	197 203 197 216 226	58'02 57'83 61'66 56'40 60'81
1906					•		13,97,87,368	1,57,32,105	58,61,913	4:19	46,13,199	5,66,021	+ 6,82.393	225	62:74

#### 15 (b) Burma railways extensions (3' 33" gauge)-Details of construction-

There are two lives under construction, viz., (1) Pegu to Martahan, 121:27 miles, which was sanctioned in 1903; and (2) Henzada to Kyangin, 65.66 miles, sanctioned in 1904.

Number Main head 16. DEOGHUR RAILWAY (3' 33" gauge)—

### Details of construction-

This line connects Deoghur with Baidyanath, a station on the East Indian Railway, and is 4.79 miles long. It was sanctioned in 1881 and opened in 1882.

Permanent-way .- The permanent-way is laid with 36-lb. steel rails on wooden sleepers.

Ballast .- The line is ballasted throughout.

Fencing .- The line is unfenced.

Curves. - The sharpest curve has a radius of 2,640 feet.

Gradients .- The ruling gradient is 1 in 60.

#### Terms of contract-

The railway is worked under the following contract:-

Contract of-12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- Land was provided free of charge.

Terms of contract.-Mossrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract .- If the Company fails to perform its obligations Government may after giving six months' notice, determine the contract, and take over the railway at a valuation based on the carnings of the two years immediately preceding. Government may also, after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, determine the contract and take the railway over at a valuation calculated at the average market rate of the shares during the previous three years, giving the Company in addition a bonus not exceeding 20 per cent. of the value so arrived at.

Rates and fares .- Certain maxima have been fixed within which the Company is permitted to vary rates.

# History of railways constructed and in progress.

[For Index see page 112.]

Number Moin head 16. DEOGHUR RAILWAY (3' 33" gauge)—concld.

#### Statistics of working-

															Таві	LE I.		TABL	s II.
	·				alen	lar ye	ear.						-	Capital ontlay to end of each year.	Gross earnings.	Net carnings.	Per cont. on capital outlay.	Earnings per milo per week.	Proportion of expenses to earnings.
1888 1884 1885	:	:	:	:	:	:	:	:	:	:	<i>:</i>	:		Rs. 2,73,331 2,75,060 2,75,000	Rs. 19 639 23,735 23,987	Rs. 6,242 10 704 9,908	2·28 3·90 3·60	Rs. 79 83 88	68·00 51·90 58·69
1886 1887 1888 1889 1890	:	:	:	:	:	•	:	:	:	:	:	:		2,75,043 2,75,043 2,41,180 2,52,576 2,82,616	25,017 24 539 95,812 28,539 26,095	11,743 12,108 11,521 12,695 10,915	4:27 4 10 4:10 4:49 3 86	100 98 104 115 105	53:06 50:64 55:37 55:51 58:17
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:				2,82,752 2,88,329 2,87,364 2,57,526 2,58,086	31,165 26,964 37,569 29,425 33,611	15,429 9,707 19,103 9,659 15,068	5°16 3°37 6°65 9°36 5°31	125 108 152 118 130	50:49 64:00 49:47 67:17 54:46
1896 1897 1898 1899 1900	:	:	:	: :	:	:	:	:	:	:	:	:		2,57,797 2,57,942 2,65,453 2,-7,525 2,67,979	30 014 30,320 32,40 33 262 34,000	11,493 11,153 6,601 6 618 7,376	4 00 3:87 2:28 2 32 2:56	120 122 129 134 140	61-69 63:22 79:44 79:02 78:87
1901 1902 1903 1904 1905 1906	:	:	:	•	:	:	:	:	:	:	:	:		2,91,265 3,01,057 3,01,057 3,01,057 3,00,554 3,01,256	49 2 03 29,758 40 4/8 46,605 45 397 53,502	18,616 6 0 % 10,623 14,701 19,542 20 553	6:53 2:00 3:53 4:84 4:12 6:82	191 110 162 187 182 215	61:45 79:75 73:75 68:48 70:08 61:61

Number  $\frac{\text{Main bend 17}}{\text{Sub-heads }(d) \text{ and }(b)}$ .

#### DIBRU-SADIYA RAILWAY SYSTEM-

Chairman .- Lord Ribblesdale.

Secretary.- Evan A. Jack, Esqr.

Offices .- 85 London Wall, London, E.C.

Lines comprising the system.—The Dibru-Sadiya railway system is made up of-

			(	Open line.	Order construction or stretioned for construction.	Total.
				Milos.	Milos.	Milos.
(a) Dibru-Sadiya railway (3'32" panga)				77 50	8.52	86 02
(b) Ledo and Tikak-Margherita Colliery railway (3' 32" gauge)				8.50		8:50
	Tot	al		86 0 )	8 51	94.52

# 17 (a) Dibru-Sadiya railway proper (3' 34" gauge)-

# Details of construction-

This line is 77:50 miles long and may be divided into main line (Dibrugarh to Dihing Brilge), 61:50 miles, and the Talap branch, 16 miles. Its construction was sanctioned in 1881 and it was opened through in 1885.

There are, in addition, 8:52 miles under construction.

Permanent-way.—The line is laid with 411-lb. and 50-lb. flat-footed steel rails. The sleepers are uriam and cast iron plate of the Denham-Olpherts' type.

Ballast .- The line is partially ballasted with broken stone.

Fencing .- The line is unfenced, with the exception of a short length at Dibrugarh. ..

Curves .- The sharpest curve is of 700 feet radius.

Gradients .- The ruling gradient is 1 in 150.

# Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -26th May 1830 (between the Secretary of State and the Assam Railway Company subsequently called the Assam Railways and Trading Company) for maintenance and working.

25th July 1881-Contract modifying that of 1880.

The general conditions of the contracts are as follows :-

Government aid.—Government guaranteed the payment of a subsidy, not exceeding in any year Rs. 80,000 twelve months after the opening of the main line or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line. Government similarly guaranteed a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The payment of guarantee terminated on the 50th June 1903. The free use of public roads is also provided for.

Currency of contract.—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. Government may

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 17 DIBRU-SADIYA RAILWAY SYSTEM—contil.

17 (a) Dibru-Sadiya railway proper (3' 32" gauge)—concld.

Terms of contracts-concld.

determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

Norg.—The Company having waived all its rights under clause 7 of contract dated 25th July 1831 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

Power of Company to surrender contract .- Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—These were subject to approval by Government from time to time while subsidy was payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

#### Statistics of working-

						TABLE I.			•		TAR	ir II.	
Cale	ndar	your		Capital outlay to end of each year.	Gross oarmugs.	Net	Perceutage on oapstal outlay,	Subsidy from local Govern- ment.	Total income.	Percentage of total income on capital outlay.	Earnings per rade per veck.	Proportion of expenses to carmings.	
1883 . 1881 . 1885 .	:	:	 :	Rs. 22,22,253 40,65,288 49,46,729	Rs. 48,220 2,66,133 2,57,335	Rs. 35,375 68,406 63,864		Re 54,550 54,500	Rs. -35,375 -13,856 -9,364		R <sub>3</sub> , 52 67 62	17170 13161 12303	
1886 . 1887 . 1888 . 1889 . 1890 .	:	:	:	49,73,753 53,32,605 53,73,445 55,18,750 57,00,682	3,46,479 4,04,928 4,25,530 4,64,018 5,14,266	53,154 1,02,540 1,01,759 1,25,147 1,76,960	1.67 1.92 1.89 2.27 3.10	54,654 1,00,000 1,00,000 1,00,000 1,00,000	1,07,808 2,02,510 2,01,759 3,25,147 2,76,950	2·17 9·80 8·75 4·08 4·85	81 94 105 114 127	80:65 74:68 76:00 73:03 65:59	
1891 1892 . 1893 . 1891 . 1895 .	:	:		67,05,474 69,56,304 71,70,562 70,97,487 74,02,729	4,98,642 5,13,213 5,12,098 5,31,645 6,01,112	1,70,526 1,63,719 1,52,972 1,95,732 2,69,543	2 54 2 35 2 13 2 76 3 61	1,00,000 1,00,000 1,00,000 1,00,000 1,00,000	2,70,526 2,63,719 2,52,972 2,95,732 3,69,543	4:03 8:79 9:53 4:17 4:99	123 127 127 132 132	68:19 70:13 63:18	
1896 . 1897 . 1898 . 1899 . 1900 .	:	:		74,01,496 74,20,119 74,10,474 74,56,183 77,14,349	6,47,360 7,74,189 7,81,415 8,59,114 9,00,847	3,12,286 2,64,750 2,82,478 4,19,694 4,62,381	4·22 3·57 3·80 6 03 5·99	1,60,660 1,00,000 79,000 37,975	1,12 286 3,64,750 3,32,475 4,87,666 1,62,381	5:57 199 1233 6:64 5:99	161 192 194 210 224	51.76 68.12 63.55 47.68 45.67	The amount
1901 . 1902 . 1903 . 1904 .	:	:		82,00,747 62,00,694 82,32,530 87,01,363 87,31,147	9,28,578 8,51,889 9,16,777 9,48,178 9,54,293	4,73,307 1,11,187 4,57,974 4,21,317 4,32,053	5:77 5:01 5:56 4:54 4:95	  	4,73,367 4,11,187 4,57 974 4,31 317 4,32,653	5:77 5:01 5:56 4:84 4:95	230 211 227 235 237	19:03 51 73 50:05 55:58 54:73	sidy received during 1899 was due for a previous pe- ried.
1906 .				88,18,873	10,08,281	4,0-,634	1:63		4,08,634	4 63	250	59*47	

### 17 (b) Ledo and Tikak-Margherita Colliery railway (3' 3)" gauge) -

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

#### Details of construction-

The line is 8:50 miles long, viz., main line (Dihing bridge to Ledo) 5:50 miles, and branch (Margherita to Namdang) 3 miles. The main line was opened in 1884 and the branch in 1901.

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails on uriam sleepers.

Ballast .- The main line is three-fourths ballasted with broken stone, but the Namdang branch is unballasted.

Fencing.—The line is unfenced.

Curves .- The sharpest curve is of 800 feet radius.

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contract-

The railway is worked under the following contract:-

Contract of—30th July 1881 (between the Secretary of State and the Assam Railways and Trading Company) for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms.—Contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

# History of railways constructed and in progress [For Index see page 112.]

Number Main head 17 Sub-heads (a) and (b). DIBRU-SADIYA RAILWAY SYSTEM-concld.

17 (6) Ledo and Tikak-Margherita Colliery railway (3' 33" gauge)—concld.

Terms of contract-concld.

The general conditions are as follows:-

Government aid .- Nil.

Currency of contract.—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles, and for a further term of 30 years within an area of at least 4 square miles.

Power of Company to surrender contract.-Nil.

Terms of working .- The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent. of its gross earnings for the use of rolling stock; all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.

Rates and fares .-- Certain rates and fares have been sanctioned by Government.

#### Statistics of working-

												1	T'A I	trk I					Таві	E II.
train the					(	Calend	i.er y	oar.		•	r		-		Capital outlay to end of each year.	Gross earnings	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
											-			-	Rs.	Rs.	R4.		Rs.	
1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	:	:	:	12,83,416	45,871 55,313 63,084 65,724	8,024 3,752 22,053 17,981	0·70 0·31 1·72 1·40	88 142 162 169	82:51 93:2 <b>9</b> 65:04 72:64
1901 1902 1903 1904 1905	:	:	:	•	:	•	:	:	:	:	:	:	:	:	16,30,162 16,33,446 16,62,082 16,62,688 16,78,156	70,293 58,259 59,077 56,108 59,439	11,145 437 -8,208 13,158 27,210	0 68 0 08  0 79 1 62	123 102 103 120 127	84:15 99:25 113:89 76:55 54:22
1906			•												16,83,031	65,115	25, <b>05</b> 2	1:49	139	61.52

# Number Main head 18 (a) to (a). JODHPUR-BIKANER RAILWAY SYSTEM—

Lines comprising the system. - The Jodhpur-Bikaner railway system is made up of -

															Miles.
(a)	Jodhpur-Bikaner (Jodhpur section) (3' 33" gauge)				٠.										463.89
• •	Jodhpur-Bikaner (Bikaner section) (3' 3 " gauge)													-	245'85
(c)	Jodhpur-Hyderabad radway (British section) (3' 33"	gauge)		•	•	•	•	٠	•	•	•		•		123.98
												Tot	al	٠	833-22

#### 18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3%" gange)-

#### Details of construction -

The open mileage of the section is 463:39 miles. First sanction to construction was accorded in 1881 and the line was opened through to the British frontier in 1900. The Merta city branch was opened in 1905.

Permanent-way.—'The line is laid with 36-lb., 411-lb. and 50-lb. flat-footed steel rails. There are also some 36-lb. iron rails in the Merta city branch. The sleepers are steel trough, deodar and pine.

Ballast.-On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

### Terms of contracts --

The railway is worked under the following contracts:-

Contracts of -13th July 1889 (between the Government of India and the Jodhpur and Bikaner Durbars) for constructing and working the line.

The general conditions of the contracts are as follows :-

Government aid .- The line is the exclusive property of the two Durbars.

Currency of contracts.—These contracts may be medified at any time by mutual consent.

Terms of working. - Each Durbar to receive all the profits of the section of line belonging to that Durbar.

Rates and fares.-No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 18 Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—contd.

18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3\square)—concld.

Statistics of working-

	TABLE I.															Table II.		
	Calendar year.												Uspital outlay to end of each year.	Gross carnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings
1883 1684 1885 1886 1887	:	:	:	:	:	:	:	:	:	:	:		Rs. 4,99,866 8,09,995 15,40,385 21,22,593 22,81,433	Rs. 40,361 64,262 1,70,601 2,03,728 3,18,703	Rs. 29,110 31,748 1,12,505 1,33,318 1,91,677	4·62 3·92 7·30 6·23 8·40	Re. 42 30 54 62 55	42:74 50:59 34:30 35:20 39:86
1888 1889 1890 1891 1892	:	:	:	:	:	:	:	:	:	:	:		22,80,006 22,73,978 22,73,838 41,87,110 60,59,552	3,60,803 3,59,858 3,70,825 6,12,839 9,46,980	1,91,558 1,92,258 1,96,192 3,34,364 5,28,941	8:40 8:45 8:63 7:99 8:73	56 56 58 66 74	46-91 46-50 47-09 45-44 44-14
1893 1894 1895 1896 1897	:	:	:	:	:	:	:	:	:	:	:	•	64,74,611 64,49,374 64,32,931 61,78,528 74,90,176	8,31,765 10,81,156 9,74,738 11,64,465 11,22,658	4,33,895 6,69,373 5,69,246 7,38,273 7,44,799	6·70 10·38 8·85 11·40 9·94	52 65 58 70 67	47:83 88:09 41:60 36:80 33:66
1898 1899 1900 1901 1902	:	:	:	:	:	:	:	:	:	:	:		1,00,85,594 1,13,42,183 1,14,29,508 1,17,24,896 1,18,69,424	12,22,726 19,09,097 16,28,478 15,67,073 16,76,216	7,30,956 11,66,844 9,07,480 7,14,836 8,35,202	7·25 10·29 7·94 6·10 7·04	102	42·22 38·88 44·27 54·39 50·17
1903 1904 1905 1906	:	:	:	:	:	<i>:</i>	:	:	:	:	:	:	1.19,31,439 1,21,90,840 1,22,63,774 1,22,77,015	16,34,708 16,87 624 19,16,254 20,91,368	8,91,196 9,58,365 11,01,294 12,23,531	7:47 7:86 8:98 9:97	71	45·48 43·21 42·58 41·50

# 18 (4) Jodhpur-Bikaner (Bikaner section) (3' 3% gauge)—

# Details of construction-

The section is 245.35 miles long. Its construction was first sand ened in 1890 and it was opened through to Bhatinda in 1902.

Permanent-way.--The permanent-way consists of 36-lb. flat-footed steel rails on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 150.

#### Terms of contracts-

See under Jodhpur section, 18 (a).

#### Statistics of working-

	TABLE I.														TABLE II.			
	Calendar year.										-		Capital outlay to end of each year.	Gross earnings.	Net' carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion o expenses to earnings.
1890 1891 1892 1893 1894 1895 1896 1897		:		:			:						Rs. 4,15,590 14,32,706 9,48,622 9,65,771 9,69,407 9,71,084 9,73,294 9,73,473	Rs.  5,130 76,547 66,725 80,274  86,539 1,20,727 1,17,010	Rs. 2,721 24,904 25,735 40,447 45,096 75,382 65,504	0°19 2°63 2°66 4°17 4°64 7°75 6°73	Ra36 34 30 35 38 53 52	46-99 67-47 61-43 49-61 47-89 37-56
899 899	:	•	:	•	:	:	:	:	:	:	:	:	23,14,152 22,61,917	1,17,010 1,37,472 1,74,589	77,616 1,01,341	3·35 3·65	52 31 37	43·54 40·22
900 901 1902 1908 1904	:	:	:	:	:	:	:	:	:	:	:	:	32,60,432 48,93,535 52,49,839 51,30,925 50,93,549	1,92,858 2,46,875 3,22,022 5,25,329 7,23,901	1,04,962 1,05,697 1,42,580 2,66,197 4,05,677	8·22 2·16 2·72 5·19 7·96	43 30 30 41 57	45:43 57:18 55:72 49:83 43:96
905 9 <b>9</b> 6	:	:	:	:	:	:	:	:	:	:.	:	:	51,72,40 <b>6</b> 82,70,205	8,83,432 10,92,838	5,62,383 4,74,513	10·87 9·00	69 86	36·84 56·56

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 18 Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—concld.

#### 18 (c) Jodhpur-Hyderabad (British section) (3' 3\\$" gauge)-

#### Details of construction-

The line connects Hyderabad (Sind) with the Jodhpur system and is 123.98 miles long. Its construction was first sanctioned in 1891 and it was opened through in 1900.

Permanent-way.—The section is laid with 60-lb. iron, and 50-lb. and 411-lb. flat-footed steel rails on deoder and Denham-Olpherts' cast-iron sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick,

Fencing.-With the exception of a few stations, the line is unfenced.

Curres.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

#### Terms of contract-

The railway is worked under the following agreement:-

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3'3\[ \] gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows: -

Currency of agreement.—As regards the working of the railway this agreement remains in force until determined by oither-party, on 12 months' notice, on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares.—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

NOTE.—Government of India, in letter No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods which is in force on the Native State section being adopted on the British action, the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining an iltered in case it may be considered desirable to enforce it bereafter.

#### Statistics of working-

									TABLE	: I					TABLE I	ī.
	Calendar year.					. <u></u>		Capital outlay to cud of each year.	Gross   carnings,	Net ormage.	Per cont. on capital cutlay	luterost.	Gain or lass to the State.	Earnings per mile per week.	Proportion of exponses to carnings.	REWARKS.
1801 1802 1803 1894 1895 1806 1807 1808 1809 1900 1901 1902 1903		• • • • • • • • • • • • • • • • • • • •						108. 2,31,401 16,31,818 16,61,091 17,72,619 17,74,095 18,07,706 20,19,772 33,18,948 41,71,400 38,81,81 10,45,972 to, 15,238	1,65,139 1,87,563 2,05,182 2,20,647 2,27,242 1,93,211 4,24,307 5,64,008 5,84,004	65,923 1,73,567 2,18,814 2,62,379	0 99 2 08 2 63 3 57 3 17 2 64 1 10 4 17 5 11 6 44	Rs. 5,356 59,649 65,767 64,949 71,420 73,552 77,553 1,77,380 1,78,984 1,52,429 1,69,771 1,60,179	Rs5,356 -61,598 -40,296 -32,878 -24,471 -7,044 -14,139 -7,304 -18,917 -1,13,051 +21,138 +50,043 +1,02,260	73 74 65 66 78 91	75.17 72.28 65.67 71.04 68.49 60.73 65.93 59.09 56.59 55.08	The figures of capital outlay in 1900 include the outlay on the Hyderahad-Rahoki section.  The gain to the State in 1901 was due to the completion of the line which was previously only partially open.
1904 1905 1906		:	:		:	:	:	39,58,681 39,67,948 40,70,625	6,45,728 7,23,989 8,91,456	3,45 006 3,69,002 5,11,938	9 30 12:58	1,54,816 1,58,622 1,57,778	+1.90,160 +2,10,380 +3,54,160	101 112 138	46.82 49.03 42.57	

Number Main head 19 Sub-head (a) . MORVI RAILWAY (3' 3 g" and 2' 6" gauges)-

The 2' 6" gauge connection between Wadhwan and Rajkot by this railway has been converted to the 3' 3,3" gauge—from Wadhwan to Than Road, 31:34 miles, on a new alignment and onwards to Rajkot, 42:60 miles, on the original alignment with a few unimportant diversions. The line between Vankaner and Morvi has been retained on the 2' 6" gauge.

### Details of construction-

The line is 94.64 miles long, divided into the 3' 34" gauge section (Wadhwan to Rajkot), 73.94 miles, and the 2' 6" gauge section (Vankaner to Morvi and a quarry siding), 20.70 miles. The construction of the 3' 34" gauge section was sanctioned in 1902 and this section was opened in 1905. The construction of the 2' 6" gauge section was sanctioned in 1883 and it was opened in 1887.

Permanent-way.—The permanent-way on the 3' 3\{\exists' gauge section consists of 41\{\frac{1}{4}}\]-lb. flat-footed steel rails on half round teak and creosoted pine sleepers; and that on the 2' 6" gauge section consists of 29-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with moorum (di-integrated) trap.

Fencing .- The line is unfenced.

Curves.—The sharpest curve on the 3' 33" gauge is of 950 feet radius; and that on the 2' 6" gauge is of 300 feet radius.

Gradients.—The ruling gradient is 1 in 150 on both gauges.

### Terms of contract-

The Morvi railway is owned by His Highness the Thakore Schib of Morvi, and is under his control.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main ead 19 MORVI RAILWAY (3' 38" and 2' 6" gauges)—concl. 1.

Statistics of working-

											TA	81.R	I.				TABI	s 11.
				c	alono	lar ye	oar.			•			Capital outlay to oud of each year.	Gross earnings,	Net errum s,	Per cent on equitit outlay,	Earnings per mile per w. ek.	Proportion of expenses to example
1886 1887 1888 1889 1890	:	:	:	:	:	:	:	:	:	:	:		Rs. 6,83,671 11,90,700 11,77,812 12,46,800 20,25,863	Rs. 31,522 1,29,107 1,60,687 1,77,321 2,00,227	Rs. Not available. 16,994 21,984 76,727 87,550	1:54 1:57 4:15 4:12	Ra. 30 39 46 50 60	103·28 86·87 86·44 68·01 70·34
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	20,55,599 21,61,519 21,57,365 20,23,526 23,99,396	0,09,419 0,09,171 0,02,518 0,20,048 0,59,072	1,08,617 1,50,370 1,47,532 1,47,667 2,00,127	5:28 6 19 6 .6 6 42 8:24	63 63 66 65 75	61-90 57:83 51:86 55 46 45:91
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:		23,82,315 21,76,757 24,79,448 25,06,414 27,28,115	3,86,833 1,27,153 3,76,320 4,10,456 4,23,308	1,81,621 2,11,642 1,63,990 1,70,053 1,55,794	7:62 8:55 6:61 6:78 5:52	79 77 77 86 87	53:06 50:19 16:41 59:56 62:49
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	:	:	:	•	27,59,152 27,32,748 27,88;452 34 06 156 43,90,517	3,58,663 9,05,659 2,98,063 3,14,656 3,25,640	1,21,534 1,15,200 1,44,719 1,88,56,9 1,74,476	4 55 97 6 5 19 5 55 3 97	73 63 61 73 69	65-00 62-86 51-44 46-73 46-99
1906													44,90,459	3 07,560	1,59,584	3 55	62	48-11

Number Main head 20 ROHILKUND AND KUMAON RAILWAY SYSTEM—

Chairmam .- Sir Charles Turner, K.C.I.E.

Managing Director - Alexr. Izat, Esq., C.I.E., M.I.C.E.

Offices -237 Gresham House, Old Broad Street, London, E.C.

Lines comprising the system.—The Robilkund and Kumaon railway system is made up of-

						Open line.	Under construction or sanction d for con traction.	Total,
						Miles.	Miles.	Miles.
(a) Robikund and Kumaen railway (7' 32" p	range	J)				117.87	84.12	201.99
(b) Lucknow-Barcilly railway (3' 32" gauge)	•					237.01	100	237.04
(c) Powayan Light railway (2' 6" gauge)						39:50	•••	39-50
							****	
				To	tal	304:41	81.12	478.53
powers-							a gripping and a second	

## Running powers-

Home line over foreign line-

				Miles.
Bhojeepura to Eureilly, Lucknow-Bareilly railway, for passenger and goods trains				12 00
Foreign line over home line-				
Bongal and North-Westorn, Daliganj to Aishbagh, for passenger and goods trains			• '	<b>3•4</b> 0

## 20 (a) Rohilkund and Kumaon railway proper (3' 35" gauge)-

#### Details of construction-

The open mileage of the Robilkund and Kumaon raitway proper is 117.87 miles, made up of (1) main line, Bhojeepura to Kathgodam, 53.92 miles and (2) the Bareilly-Kasganj section, 63.95 miles.

The main line was sanctioned for construction in 1832 and opened in 1854. The portion of the Barcilly-Kasganj section from Barcilly to Soron was sanctioned in 1903 and opened in 1906 and the portion from Soron to Kasganj was taken over from the Rajputana-Malwa railway in 1906.

There are 84:12 miles under construction, viz., (1) the M. radabad-Ramnugar branch, 47:69 miles; and (2) the Lalkua-Kashipur branch, 36:43 miles. The construction of these branches was sanctioned in 1903.

Permanent-way.—The permanent-way consists of 50-lb. steel rails on sal sleepers.

Ballast .- The bullast consists of broken brick and shingle.

Fencing .- The line is partially fenced.

Curves. - There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 20 ROHILKUND AND KUMAON RAILWAY SYSTEM—contil.

20 (4) Rohilkund and Kumaon railway proper (3'35" gauge)-contd.

Terms of contracts-

The Robilkund and Kumaon and Lucknow-Bareilly radways are worked under the following contracts:-

Contracts of-12th October 1882 .- Robilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly railway and the Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.
5th February 1901.—Contract modifying the terms of the previous contracts.

24th April 1903 .- Contract as to rate of exchange for purposes of contracts of 12th October 1882 and Sth September 1890.

15th July 1904 —Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903.

The general conditions of the contracts are as follows:-

Government and .- Company's section .- Government guaranteed interest at 4 per cout, in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for jen years from date of opining, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Barcilly section.—The Company to raise £160,000 capital by debentures which Government guarantee as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 98.000. Land was provided free

of charge.

Note -All sums to be advanced by Government after the 31st December 1900 hear interest at the rate of 3) per cent, per summy under the agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross carnings.

Currency of contracts.

(1) Robi/kund and Kumaon railway contract, -Government may terminate the contract at the end of the 30th year (i.e., on the 31st December 1912) or the 50th year (i.e., on the 31st December 1932), by giving 12 months' notice. If the contract terminates by such notice or by efflux of time, Government have to pay 25 times the average not earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) Lucknow-Barcilly railway, Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year, by giving twelve months' notice. In the event, however, of the original contract, diled the 12th October 1882, terminating by efflux of time or under notice of purchase or notice of determination, this contract, ipso facto, also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract Government resume possession of the State railway on payment to the Company of the amount of the capital received, or take over its liabilities with respect

to such capital.

Power of Company to surrender contract .- Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Miner Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently half the surplus profits, after 5 profes, area to the year (within a limit of £5.000 for each half-year), has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest enterest, thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897 Government to receive half the surplus profits in excess of 6 per cent.

Note. - It has been agreed that, in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow-Barcilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system, (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open to traffic to be made half-yearly to Government for supervision), are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied (i) in meeting payment of interest on the debentures and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; (ii) in payment to Government of interest at 4 per cent. on their capital in the undertaking; and (iii) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (i) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary

History of railways constructed and in progress. [For Index see page 112.]

Number Main head 20 Sub-heads (a) to (c) . ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.

20 (a) Rohilkund and Kumaon railway proper (3' 3\square\) gauge)—concld.

Statistics of working-

				TABLE I.				TA	ple (l.	İ
Colen- dar year.	Capital outlay to end of each year.	Gross carnings.	Net carnings.	Percontage on capital outlay.	Subsidy from Government.	Total income.	Persentage of total income on expital outlay.	Earrings per mile per week.	Proportion of expenses to curu-	Remarks.
1884 1885 1886 1887 1888 1889 1890 1891 1891 1895 1895 1895 1896 1897 1990 19901 19901 19902 19903 19904 19905	R4, 19,10,306 21,71,124 92,52,962 22,41,619 23,40,100 22,96,624 20,37,223 20,40,158 20,58,575 20,82,280 20,80,410 20,78,251 20,79,863 21,20,478 21,20,478 21,48,313 21,53,125 22,09,423 23,39,11 25,59,790 43,55,575 33,54,589	Rs. 105,543 2,38,572 3,00,101 3,19,273 3,14,693 3,73,270 3,14,871 4,25,044 4,25,04 4,2	RA. 1734 40,153 88,852 76,800 1,02,120 1,20,155 1,11,003 1,33,140 1,57,780 1,41,181 1,52,973 1,51,189 1,73,184 2,21,899 2,84,020 2,23,048 2,08,804 2,13,807 2,21,809 2,34,020 2,23,048 2,08,804 2,13,807 2,21,103 1,54,126	0 000 1 125 322 3235 4235 4235 4235 501 5 15 5 6 2 2 6 17 7 16 5 10 33 1	Rs	Rs. 1,794 80,153 1,22,892 1,16,800 1,42,120 1,60,135 1,51,003 1,53,443 1,97,780 1,84,180 2,15,191 1,52,973 1,54,595 1,79,184 2,21,899 2,34,020 2,28,048 2,09,896 2,18,317 2,20,405 2,21,403 1,54,114	0-09 3-69 5-10 6-97 6-69 7-11 7-49 9-61 8-80 10-81 7-06 7-13 8-17 10-98 10-89 10-59 9-50 9-50 9-50 9-51 8-51 5-15	R4 51 68 86 92 96 107 90 112 124 134 135 136 136 136 141 141 141 141 141	95 16 66 49 58 75 63 42 57 46 56 93 54 04 58 22 54 17 56 78 52 91 63 79 50 24 40 74 45 63 46 68 46 18 46 18	The large in- orcases in the capital outlay since 1901 are due to the inclu- sion of expendi- ture on branches under construc- tion; and the decreases in net earnings to the heavy outlay on relaying the moin line and (in 1906) also to the net earnings of the Barcilly- Soron catomicon having been cre- dited to capital.
1906 .	1,16,53,319	8,00,607	1,79,124	1.51		1,79,121	1.21	124	54:56	

## 20 (b) Lucknow-Bareilly railway (3' 33" gauge) -

Details of construction :-

The open indeage is 237.01 miles, and is divided into main line (Lucknow to Bureilly), 198.55 miles and branches 38 49 miles. Sanction to the construction of the main line was accorded in 1884 and it was opened through in 1891.

Permanent-way —The permanent-way consists of 41\frac{1}{2}-lb. and 50-lb. steel rails on sall sleepers.

Ballost —The ballast consists of broken bricks, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts-See under Robilkund and Kumaon railway proper, 20 (a).

					TABLE	ı.				1		TAB	LE II.		
Calen	iar ye	ar.	Capital outlay to end of each year.	Gross carnings,	Net carnings.	Per cent. on capi- tal out- lay.	Intorest.	Com- pany's shire of net earn- ings.*	Gain or loss to the State.	BARRILLA 3' Earnines per nule per week,	Pictonity 3.".  Proved oxp to carnings.	Enrange Ferand Enringe per mile per week.	ar, 3' 3,".	LUCKNOV LY, 3' Earnings per nulo per week	
1883 1884 1885	:	:	Rs, 4,84,915 13,43,699 25,45,567	Rs.  10,2 9 82,827	Rs.  8/19 17,243	0.06 0 63	Re. 11,192 36,572 53,247	Rs	R4. - 11,192 - 35,733 - 36,001	Rs. 32	91:81 83:79	Rs. 		Rs	
1896 1887 1888 1889 1890	:	:	42,16,146 52,24,2:1 52,82,870 51,59,585 65,83,824	1,15,296 2,92,470 3,52,327 4,23,781 4,56,738	28,729 67,924 99,031 1,47,868 1,32,358	0.68 1.30 1.87 2.70 2.02	1,48,570 1,85,646 2,63,503 2,16,180 2,30,690		-1,19,841 -1,17,122 -1,04,472 -68,321 -98,361	53 50 59 64	77 46 71 17 70::1 66 15 66 08	45 46 47 59 62	76*29 73*19 70*81 65*10 72*78	:: :: ::	  
1891 1892 1893 1894 1895	:	:	79,17,816 81,66,804 83,89,362 85,93,058 87,22,466	4,95,068 6,82,836 7,28,878 9,72,269 8,25,934	1,73,011 2,74,601 2,73,541 4,48,218 3,13,116	2·19 3·36 3·26 5·22 3·59	2,72,065 3,07,651 3,26,770 3,45,323 3,56,596	11,501 2,135 79,310 15,831	99,054 44,551 55,364 + 23,585 59,814	 *. 	  		  	56 66 67 87 74	65-03 59-72 62-29 50-25 61-90
1896 1897 1898 1899 1900	:	•	89,63,620 93,02,715 94,90,476 91,97,485 90,21,432	8,27,500 8,27,371 10,34,688 12,72,160 12,53,861	3,02,071 3,35,776 5,00,200 6,33,355 6,51,957	3°37 3°61 5°27 6°63 6°57	3,48,885 3,61,550 3,64,852 8,65,587 3,73,097	13,415 26,980 65,721 76,332 1,47,611	-60,229 -52,754 +68,627 + 1,91,486 + 1,31,249	 	  	  	  	75 69 94 114 107	63:32 50:42 51:63 50:21 48:72
1901 1902 1903 1904 1905	:	•	1,01,83,243 1,12,96,019 1,15,01,911 1,17,14,505 1,17,99,857	14,53,829 14,03,266 14,96,120	7,58,124 7,69,568 7,48,689 7,97,671 8,20,992	7·44 6·81 6·51 6·81 6·96	3,91,796 4,23,528 4,53,835 4,48,328 4,50,448	99,195 71,666 52,578 54,487 16,811	+ 2,67,133 + 2,74,374 + 2,42,291 + 2,94,856 + 8,53,733	  		  	  	123 182 126 138 138	44.76 47.05 46.68 46.68 46.95
1906			1,20,09,658	16,55,250	8,36,782	6.97	4,575,88	1,20,160	+ 2,59,054					148	49 45

Based on actual receipts and payments during the year.

History of railways constructed and in progress.

[For Index scopage 112.]

Number Main head 20 Sub-heads (a) to ter. ROHILKUND AND KUMAON RAILWAY SYSTEM—concld.

20 (c) Powayan Light railway (2' 6" gauge)-

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Robilkund and Kumaon Rulway Company from 17th December 1900.

Details of construction -

This line, which connects Shahjahanpur with Meilani, is 39:50 miles long. Its construction was first sanctioned in 1889 and it was opened through in 1894.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lbs. to the yard, laid on sal sleepers.

Ballast .- The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curres .- There are no curves with a radius of less than 1,000 feet. •

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contracts-

The Powayan Light railway is worked under the following contracts:-

Contracts of-1st July 1901 (between the Seefetary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows .-

Government aid .- Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or at any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent, of the gross carnings until the line is fully equipped, and thereafter the same percentage as that at who is the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200, subject to a maximum charge of Rs. 20 per mile in each ball year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Barcilly railway.

Statistics of working. -

										TABLE I.				Та	RI.E II.
			Cu	dend.	Lr Yea	r.		•		Capital outlay to ead of each year.	Gross carnings,	Net. carnings.	Per cent on eapital outlay	Earnings per mile per week,	Proportion of expenses to carnings.
1901 1902 1903 1904 1905		:	•	:	:	:	:	:	:	Rs. 8 11,038 8,93,456 8 94 619 8,94,751 8,94,751	184, 66,862 75,675 74,815 78 615 92,614	Rs, 20,450 22,521 28,482 30,937 36,707	2:09 2:52 3:18 3:16 4:10	Rs. 73 37 35 38 45	70:00 70:24 60:34 60:34
1906	•	•		•	•	•		•	•	8,91,751	99,566	39,491	4-11	48	60:34

Number Main header. SOUTH INDIAN RAILWAY SYSTEM—

Chairman .- Sir Herry Kimber, Bart, M. P.

Managing Director .- Henry W. Notman, Esq.

Offices .- 55. Grace Church Street, London, E. C.

Lines comprising the system.—The South Indian railway system is made up of-

		OI	en line.	Under construction or sanctioned for construction.	Total.
			Miles.	Miles.	Miles.
(a) South Indian railway (3' 3?" gauge)			1,134.00	13.88	1,143.88
(b) Karaikkal-Poralam railway (3' 3'," gauge)			14.65	•••	14.65
(c) Pondicherry railway (3' 34" gauge)			7.85	***	7.85
(d) Tanjore District Board railway (3' 37" gauge)			103 83	•••	103:36
(e) Tinnevelly-Quilon (Travancore) (British section) (3' 32" gauge)			50.48		50.48
(f) Tinnevelly-Quilon (Travancore) (Native state section) (3' 3?" gauge)	•	•	57.98	***	57-98
Total		-	1,364.32	13.88	1,378:20

History of railways constructed and in progress. [For Index see page112.]

Number  $\frac{\text{Main head}}{\text{Sub-heads }(a)} \frac{21}{\text{to }(f)}$ . SOUTH INDIAN RAILWAY SYSTEM-contd.

21 (a) South Indian railway proper (3' 33" gauge) -

#### Details of construction-

The total open mileage of the South Indian railway proper is 1,130:00 miles. This may be divided into (1) Madras-Tuticoriu section, main line (Madras to Tuticorin), 416:54 miles; branches, 320:18 miles: (2) Fillupuram-Dharmararam section, main line (Villupuram to Dharmavaram), 279.18 miles; Gudur branch, 84:10 miles. First sanction to the construction of (1) was given in 1559 and it was opened through in 1879. (2) was sanctioned in 1888 and opened through in 1892.

In addition to the above there are 13.88 miles under construction.

Permanent-way .- The rails in use are 50-lb. and 52-lb bull-headed steel, 56-lb. and 411-lb. flat-footed steel, 40.3-lb. flat-footed and 68-lb. double-headed iron. The sleepers are east iron pot, steel transverse, Denham Olpherts' cast iron and

Bullast .- The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing .- The line is fenced, with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Paniban branch which are fenced only at stations.

Curves .- The sharpest curve is of 500 feet radius.

Gradients .- The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Karur-Erodo sections where it is 1 in 100.

#### Terms of contracts-

The railway is worked under the following contracts:-

Contracts of -24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

> 27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:-

Terms of contract .- The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the

of purchase Premium . 989,277 ••• 4,197,557

contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was

Company's stock at date of purchase ...

L4,197,557.\* The Secretary of State assumed all liability in councetion with the company's debentures and debenture stock which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was

under construction by the former Company at the date of the termination of its contract.

Any further moneys required are provided either by the Secretary of State or raised by the Company under guarantee Subject to the provision of the contract, all moneys raised by the Company become the absolute property of the Secretary of State.

Currency of contract .- Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it by giving six months' notice should the Company fail to observe its obligations or the line be worked at a loss for not less than three halfyears continuously. On the expiration of the contract Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to entrender contract .- Nil.

Terms of working.—After deducting working exponses (which shall include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts shall be applied in payment to Government of the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital; at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company; at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamhan branch; and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above, the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 21 South INDIAN RAILWAY SYSTEM—contd.

21(a) South Indian railway proper (3' 33" gauge)-concld.

Statistics of working-

	TAB	LE I [INCLUDIN (BEFFISH	G THE TINNE	VELLY-QUILO STATE SECT	ON (TRAVANCO IONS) UP TO 19	RE) RAILWAI	r •		'Г'	BLE II HE PON U YAWLI	DICHER	RY	
Calon- dar year.	Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Company's share of not carnings *	Gain or loss to the State.	Calen- dar year.	Earn- ings per mile per week.	Proportion of expenses to earnings	Culen- dar year.	Farn- ings per mile per week.	Proportion of expenses to carnings.
	Rs.	Rs.	Rs.		Rя.	Rs.	Rs.		Re.			Rs.	
1879 1880 1881 1882 1863	4,41,96,588 4,46,77,075 4,52,92,730 4,53,69,280 4,53,97,614	33,62,067 35,59,593 37,55,688 87,58,714 38,69,668	10,63,953 9,30,017 12,07,726 14,02,328 13,22,334	2:49 2:08 2:73 3:09 2:1	20,95,206 21,28,643 21,30,568 21,40,871 21,46,579	  	$\begin{array}{c} -10.21,953 \\ -11,98,656 \\ -8,92,842 \\ -7,38,543 \\ -8,24,246 \end{array}$	1861 1862 1863 1864 1865	77 61 71 69 79	47:45 41 43 41:60 57:55 49:53	1897 1588 1889 1890 1891	118 159 167 181	68.20 68.98 70.11 57.50
1884 1885 1886 1887 1888	4,67,51,662 4,93,74,900 5,15,40,172 5,40,64,399 5,57,91,978	41,89,049 45,60,126 49,20,176 51,79,324 56,58,683	14,92,191 15,81,714 14,75,914 15,86,729 16,31,692	3:19 3:20 2:86 2:89 2:92	25,40,471 27,02,145 29,80,496 31,25,720 33,80,057	:: :: ::	- 10,47,98) 11,20,431 15,04,582 15,38,99) 17,48,365	1866 1867 1863 1869 1870	106 86 90 84 84	49°28 49°66 15°64 61°14 62°10	1892 1893 1-94 1895 1896	151 137 149 118 165 165	65:47 63:01 61:25 58:99 56:13 54:89
1889 1890 1801 1802 1893	6,25,01,638 7,27,15,494 7,72,11,805 7,82,83,761 7,63,31,043	59,39,378 64,25,510 70,36,756 77,14,996 80,92,415	17,63,111 26,67,305 23,58,724 27,77,005 30,34,332	2:82 3:66 3:05 3:55 3:98	35,29,985 35,19,564 35,89,776 39,51,093 38,58,152	 1,13,811 	$\begin{array}{l} -17,66,824 \\ -9,65,600 \\ -12,31,012 \\ -14,74,088 \\ -8,23,820 \end{array}$	1871 1872 1873 1874 1874	84 87 120 161 96	55 61 56 87 \$1 9 0 60 81 \$8 16	1897 1593 1599 1904 1904	170 157 159 166 188	53:01 54:50 52:41 50:27 46:17
1894 1895 1896 1897 1898	7,64,13,362 7,68,38,604 7,67,63,325 7,66,46,858 7,45,21,673	80,16,559 59,14,047 89,15,581 91,81,409 84,67,581	32,83,965 58,96,987 40,27,489 42,96,757 58,85,527	4 30 5 07 5 07 5 61 5 15	42,81,812 42,75,575 40,60,677 38,76,142 37,49,523	1,06,449 2,55,71 2,51,567 3,55,76 3,66,473	$\begin{array}{l} -11.04,396 \\ +6.7,862 \\ +2.84,755 \\ +95,225 \\ +2.20,467 \end{array}$	1876 1877 1873 1879 1880	90 107 102 105 106	53:27 50:88 66:65 68:38 73:87	1902 1903 1904 1905 1906	189 203 214 221 227	45°60 39°99 44°35 49°51 55°61
1899 1900 1901 1902 1903	7,58,82,623 7,69,70,119 8,21,78,918 • 8,19,97,226 8,69,72,113	81,74,462 89,04,825 1,01,44,657 1,05,98,282 1,23,82,517	39,83,540 43,97,916 54,15,176 57,14,2 4 73,77,644	5 28 5 71 6 57 6 72 8 48	36,39,891 36,77,879 37,23,736 39,64,367 40,28,063	2,17,608 3,68,408 4,59,540 4,89,18a 6,96,450	+ 99,041 + 3,51,629 + 12,31,900 + 12,69,702 + 26,53,126	1881 1882 1883 1884 1885	109 109 112 122 132	67 04 62 69 65 13 64 18 65 12			00 01
1904 1905 1905	10.01,55,636 8,62,95,191 8,91,97,605	1 28,18,085 1,20,34 476 1,32,75,295	71,16,981 65 77,3 0 58,92,976	7 11 7 62 6 62	45 90 992 27,03,867 27,89,511	7.05,458 6,52,963 5,66 743	+18 20,501 +32,15,407 +25,56,7.2	1836	113	69•7⊀			

## 21(b) Karaikkal-Peralam railway (5' 33" gauge)--

The line is partly in British, and partly in French, territory and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and part of Karukkal in communication with the railway system

## Details of construction-

The line is 14:65 miles long. Its construction was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of thi-lb that-footed steel rails had on wooden and steel transverse sleepers.

Ballast.-The line is ballasted with laterite.

Fencing .- The line is fenced only at stations.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients .- The ruling gradient is 1 in 200.

## Terms of contract-

The railway is worked under the following contract :-

Contract of -27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, plus 5 per cent. of the gross receipts of the line for the use of the main line rolling-machinery. If, at any time, the Company can show that the working of the railway involves an actual loss on the percentage term, the Government of the French Settlements in India have to make good the loss.

Rates and fares .- Same as on the South Indian railway.

Based on actual receipts and payments during the year.

## History of railways constructed and in progress.

[For Indem see page 112.]

 $_{\mathrm{Sub-heads}\;(a)\;to^-(f)}^{\mathrm{Main-head}\;21}$ . SOUTH INDIAN RAILWAY SYSTEM—contd.

21(b) Karaikkal-Peralam railway (3' 3\sqrt{gauge})-concld.

Statistics of working-

												TABLE	I.		TABI	m II.
	Culendar year.  Capit outlay ond of eac											Gross carnings,	Net carnings.	Per cent. on espital outlay.	Earnings por mile per week.	Proportion of expenses to carnings.
											Rs.	Rs.	Rs.		Rs.	7
1895 1896 1897 1893 1899	:	:	:	:	:	:	:	:	:	•	4,759 59,000 5,93 082 7,21,665 7,25,341	 19,703 27,685	 7,855 9,037	  1 09 1 25	   27 37	60·19 67·36
1900 1901 19 <b>02</b> 19 <b>03</b> 1904	:	:	:	:	:	:	:	:	:		7,29,715 7,23,786 7,23,786 7,23,786 7,23,786	24,608 30,450 32,736 38,933 36,945	9,478 13,314 14,619 19,864 29,432	1·30 1·84 2·02 2·74	32 40 43 51 48	61-48 56:28 55:34 48:98 179:66
1905 1906	:	:	:	:		:	:	:	:	·	7,23,786 7,23,786	36,922 39,035	4,406 4,420	0.61	4S 51	88:07 111:32

## 21(c) Pondicherry railway (3' 3\square)-

The line is in French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

The line is 7.85 miles long. Its construction was sanctioned in 1878 and it was opened in 1879.

Rermanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers and with 414-lb. flat-footed steel rads on wooden sleepers.

Ballast.—The line is ballasted with stone. Fencing.—The line is fenced.

Curves.—The sharpest curve is of 495 feet radius. Gradients.—The ruling gradient is 1 in 200.

#### Terms of contract-

The railway is worked under the following contract :-

Contract of -30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows:—

Currency of contract.—The contract will be terminable by either party on giving 6 months' notice expiring on the 31st December in any year.

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fures .- Same as on the South Indian railway

															TAI	BLE I.		TABI	m II.
					Calc	ndar	. You	<b>:.</b>				4		Capital outlay to end of each year,	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Farnings per nule per week.	Proportion of expenses to earnings.
879 } to 889 }		•	•		•									Rs. Information	Rs. not availabl	Rs.		Rs.	
890 1691 1892 1893	•	:	:			:	•	:	:	:	:	:	:	5,68,543 5,68,543 5,68,543 5,68,543	20,106 15,341	20,107 15,341 18,014	3·51 2·70 3·17	ì	
894 895	:	:	:	:	:	:	:	:	•	:	:	:		5,68,543	18,014 27,958 50,328	18,425 22,711	3·21 8·99		
898 897 898 899	:	:	:	:		:	:	:	:	:	:	:	:	5,68,543 5,68,543 5,68,543 5,68,543	39,651 36,592 31,830 45,305	17,776 17,169 14,994 21,627	3·13 3·02 2·53 3·80	≻Included with Indian railway	
900 901 902	:	:	:	:	:	:	:	:	:	:	:	:	:	5,68,548 5,68,543 5,68,543 5,68,543	59,583 60,174 70,478	23,193 32,366 37,960	4·08 5·69 6·68		
904 905 906	:	:	:	:	:	:	:	:	:	:	:	:	:	5,68,543 5,68,513 5,69,543	73,416 60,119 58,414	44,258 33,662 29,827	7·78 5·92 5·23	143	48'94

# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head } 21}{\text{Sub-heads } (a) \text{ to } (f)}$ . SOUTH INDIAN RAILWAY SYSTEM--contd.

## 21(d) Tanjore District Board railway (3' 33" gauge)-

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a now departure, and has opened the way for the provision of railways for which Government are unable to find the money immediately when the District Board has raised sufficient capital from its cess.

#### Details of construction-

The open mileage (Mayavaram to Arantangi), including the quarry branch is 193:36 miles. Construction was first sanctioned in 1890 and the line was opened through in 1903.

Permanent-way.—The line is laid with 414-lb. flat-footed steel and 40-3-lb. flat-footed iron rails on sal, pyinkado, west coast teak and jariah sleepers.

Ballast.—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

Fencing .- The line is fenced only at stations.

Curves.—The sharpest curve is of 1.146 feet radius.

Gradients .- The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottai where it is 1 in 160.

#### Terms of contract-

The railway is worked under the following contract :-

Contract of-22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid .- Land was provided free of cost.

Terms of contract.—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madias from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900 the Tanjore District Board took over the Government section and became sole owners—the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line was carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances this condition will not be enforced up to 31st December 1920 (Government of India No 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which shall include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), plus 5 per cent. of the gross receipts of the line for use of rolling-stock.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

									Тава	a. f.			Тап	τ. 10 11.
		Cale	enda	r you	r.		Capital outlay to end of each your.	Gross carn- tags,	Net carnings.	Per cent. on capital outlay,	Interest.	Gain or lose to the State.	Earnings per mile per week.	Propertion of expenses to earn ings.
1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900			:	•	:		88, 61,509 4,92,149 13,84,143 21,02,957 23,70,124 24,47,138 24,91,930 24,91,854 84,91,905 24,97,935 26,160,776 32,17,741	Rs	Rs 62,942 93,669 99,361 1,11,496 77,627 96,708 97,782 1,45,765	2.65 3.53 4.06 4.17 3.11 3.88 3.69 4.22	Rs. 1,230 10,873 37,331 1,00,701 95,700 97,861 99,159 99,843 99,845 1,02,734 1,33,831	Rs1.230 -1.0573 -37,731 -37,759 -2,031 +1.100 +12,337 -22,216 -3,047 -4,952 -3,076	Rs 103 86 88 95 28 86 83 103	 61·50 61·30 59·70 58·10 68·47 60·01 32·02 58·29
1902 1903 1901 1905 1906	:	:	:	:	:	:	88,19,202 45,70,190 46,32,763 47,33,000 47,98,375	8,08,879 8,90,747 5,24,490 5,86,680 6,01,066	2,09,167 2,09,167 2,61,364 2,65,302 2,02,83	8 84 4 58 5 64 5 61 4 65	1,63,157 1,97,476 2,25,868 2,21,234 2,84,646	-16,393 +11,691 +35,496 +44,063 -1,813	103 106 101 113 116	52-48 46-47 50-17 54-78 61-26

# History of railways constructed and in progress. [For Index see page 112]

Number Main head 21 Sub-heads (a) to (f). SOUTH INDIAN RAILWAY SYSTEM—concld.

21(e) Tinnevelly-Quilon (Travancore) (British section) (3' 3%" gauge)-

#### Details of construction-

The line is 50.48 miles long. Its construction was sauctioned in 1899 and it was opened in 1903.

Permanent-way.- The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.-The line is ballasted throughout with broken stone.

Fencing .- The line is fenced at stations, and at a few places where it runs close to villages and public roads

Curves.—The sharpest curve is of 1,432.5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

#### Terms of contract-

The Travancore branch is worked under the following contract :-

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working. The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest at 3½ and 3½ per cent. on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, subject to maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency being met by the Native State.

Rates and fares .- Same as on the South Indian railway.

## Statistics of working-

					TA	BLE I.							TAB	LE II.
	END C	OUTLAY TO OF EACH CAR.		Net e	ARNINGS,	PER CI CAPI OUT		INTEREST	CHARGES.	British	aretion.	88.	(Incl.) THE N STA	TE
Calendar year.	British section.	Native State scotion.	GROSS EARNINGS.	British section.	Native State Section.	British section.	Native State section.	Drittell	Native State section.	South Indian Railway Company.	State.	Nutive State Soction.	Earnings per mile per weck.	Proportion of expenses to earnings.
	Ra.	Rs.	Rs.	Rs.	Rs.			Rs	Rs	Rs.	Rs.	Rs.	Ru.	
1962 1963 1904	Included	with the So	uth Indian	railway	proper .		4			•••		{	81 101 85	44·84 41·18 51·04
1905 1 <b>9</b> 06	43,40,925 43,62,285	1,17,84,077 1,18,26,747	4,86,757 4,97 643	68,314 61,824	1,80,963 1,60 655	1:57 1:42	1:54 1:36	1,49,273 1,49,700	3,99,750 3,98 #25	13,294 13 959	-67,695 -73,937	-2,18,787 -2.3×,270	86 88	48:78 55:29

### 21(f) Tinnevelly-Quilon (Travancore) Native State section (3' 3\frac{3}{3}" gauge)-

## Details of construction-

The Native State section is 57.98 miles long. Its construction was sanctioned in 1899 and it was opened through in 1904.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on east iron pot sleepers, except for a length of 24.56 miles, between Ponalur and Shencottah, where there are wooden sleepers of jarrah, irul and teak.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced only at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Quilon and Ponalur is 1 in 100 and between Ponalur and Shencottah 1 in 50.

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) British section [21 (c)]. Statistics of working—

See ander British section [21 (e)]

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m).

## SOUTHERN MAHRATTA RAILWAY SYSTEM-

Chairman .- Colonel Sir William S. S. Bisset, R. E., K.C.I.E.

Secretary .- E. Z. Thornton, Esq.

Offices.-46, Queen Anne's Gate, S. W.

Lines comprising the system The Southern Mahratta railway system is made up of-	
Open hue.	Under construc- tion or Total. sanctioned for construction.
Milos	Miles. Miles.
(a) Southern Mahratta railway (3' 3]" gauge)	4 1,042.04
(b) Bellary-Rayadrag railway (3' 3\" gange)	5 33.35
(c) Birur-Shimoga railway (3' 34" gaugo)	2 37-91
(d) Guntakal Mysore frontier railway (3° 31" gange)	u 119-50
(e) Hindupur (Yesvantpur-Mysore frontier) radway (3' 34" gauge)	5 51.35
(f) Ho-pet-Kottur railway (3' 34" gauge)	
(g) Kolhapur railway (7 31" gauge)	
(h) Mysore-Nanjangud railway (3' 3\frac{1}{3} gang 1)	
(i) Mysore section (Southern M thratti) (3' si'' gauge)	
(j) West of India Portuguese radway (3' 34" gauge)	
(k) Berwada Masulipatam radway (3' 3' gauge).	49:47 49:47
(l) Kurnool Road-Kurnool radway (3' 34" yange)	32 00 32 00
(m) Sangli railway (3'31" yawje)	5.77 5.77

#### Bunning powers-

Home line over foreign line -

1.724.53

87-24

1,811.82

## 22(a) Southern Mahratta railway proper (3' 3\frac{3}{4}" gauge)-

#### Details of construction-

The open mileage of the Southern Mahratta Railway proper is 1,012:04 miles. This may be divided into (1) main line (Portuguese frontier to Tadepalli) 500:97 miles, and (2) branches, 532:07 miles. Construction was first sanctioned in 1879 and the main line was opened through in 1890.

Permanent-way.—The rails in use are of \$11\cdot-1b., 50-1b. and 62-1b flat-footed steel. The sleepers are teak, jamba and steel trough.

Ballast.—The line is ballasted throughout the main line and Poona branch with stone, gravel and sand; the Haribar branch with stone, and the Bijapur branch with stone and gravel.

Fencing.—The line is only partially fenced.

Curres.—The sharpest curve on the main line is of 603 feet radius. The sharpest curve on the Poona branch is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

#### Terms of contracts-

The Southern Mahratta railway is worked under the following contracts:--

Contract of-1st June 1882, - Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Decean railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Rambennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows :-

Government aid.—Interest in sterling on share capital at 31 per cent, is guaranteed, and an additional 1 per cent, until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contract.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (i.e., on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the Company fails to observe its obligations, or the line is worked at a loss for three consecutive half-years. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

Nors.—On the 21st June 1906 the Secretary of State for India gave notice of his intention to determine on the 30th June 1907, the contract of the 1st June 1882 and all contracts supplemental thereto. But he has since permitted the Company to continue the working as at present up to 30th June 1908.

Power of Company to surrender contracts.—The Company may determine the contracts on the 30th June in any wear by giving one year's previous notice.

# History of railways constructed and in progress. [For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m)

SOUTHERN MAHRATTA RAILWAY SYSTEM-contd.

22(a) Southern Mahratta railway proper (3' 3 gauge) -concld.

Terms of contracts-concld.

Terms of working.—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net receipts belonged to Government, unless one-fourth part of the same exceeded the extra guarantee of \(\frac{1}{2}\) per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890 three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government. Statistics of working—

							TABLE I	•				TAB	LE II.
Ca	len	dar	our.		Capital outlay to end of each year.	Gross . carnings.	Not carnings.	Per cent. on capital outlay.	Interest.	Company's share of net carnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1884 1885	:	:	:	:	Bs. 2,77,07,721 3,63,00,076	Rs. 2,13,059 8,66,226	Rs. —18,131 1,40,238	0.88	Rs. 14,77,196 19,81,340	Rs. 	Вн. —14,95,327 —18,41,102	Ra. 50 63	108-51 83-80
*000	:	:	:	•	6,15,07,620 7,87,73,165 8,68,81,288 9,18,52,138 9,82,85,016	16,31,918 30,32,417 35,38,616 40,31,604 44,71,095	4,88,392 10,03,624 8,85,493 9,61,618 9,14,664	0.79 1.27 1.01 1.04 0.98	26,43,220 34,64,086 31,89,505 32,91,520 31,39,444	 41,700 30,036	-21,54,828 -24,60,462 -23,04,012 -23,71,602 -22,54,816	92 87 86 88 85	69:83 66:01 75:70 76:15 78:19
1891 1892 1893 1894 1895	:	:	:	•	9,42,66,041 9,61,10,671 9,45,71,662 9,51,44,496 9,56,02,591	47,60,567 44,33,107 57,29,918 54,50,542 64,68,011	16,29,919 13,47,999 23,16,567 20,18,567 25,88,948	1.72 1.10 2.45 2.12 2.71	35,59,851 37,85,511 85,42,479 45,87,598 46,80,290	2,58,845 3,43,266 5,84,949 5,57,556 5,22,407	-22,18,777 -21,80,778 -17,60,861 -31,26,587 -26,13,740	89 82 106 108 119	65·76 68·69 59·69 65·44 53·65
1896 1897 1898 1899 1900	:	:	:	:	9,60,94,786 9,67,12,838 9,74,67,550 9,78,60,560 9,82,62,274	67,12,230 64,92,310 50,61,871 58,70,616 64,66,526	29,11,959 27,82,625 15,02,414 18,95,002 22,83,366	\$.03 2.88 1.54 1.94 2.32	44,45,740 42,62,886 41,10,275 40,10,557 40,02,119	7,28,698 4,97,133 5,41,277 3,85,332 5,81,807	-22,57,479 -21,77,394 -31,52,138 -25,00,887 -23,00,560	124 119 93 108 119	56-59 56-96 70-32 67-72 64-69
1901 1902 1903 1904 1905		:	:	:	0,84,64,118 0,85,18,781 9,88,51,177 0,91,38,895 10,18,29,322	58,29,471 64,50,686 66,72,302 73,48,458 76,67,700	17,31,131 28,09,908 25,50,721 26,97,722 30,16,473	1·75 2·34 2·58 2·72 2·98	40,42,851 40,79,645 40,94,983 41,08,930 41,37,632	4,92,729 5,03,168 6,01,133 7,20,960 6,20,764	-28,04,445 -22,72,905 -21,45,393 -21,32,168 -17,41,923	167 119 123 135 141	70-36 64-24 61-77 63-39 60-66
1906					10,16,98,345	82,82 914	33,10,570	3.26	42,08,005	8,76,167	-17,73,602	152	00.03

## 22(b) Bellary-Rayadrug railway (3' 3%" gauge)-

The construction of the Bellary-Rayadrug railway by the agency of the Southern Mahratta Railway Company was sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessoning the difficulties and troubles incidental to the periods of scarcity.

### Details of construction-

The line is 33.35 miles long. It was sanctioned in 1902 and opened in 1905.

Permanent-way.—The permanent-way consists chiefly of flat-footed steel rails, weighing between 411 and 39 lbs. per yard, laid on teak, jamba and Australian eucalyptus sleepers.

Ballast .- The ballast consists of broken stone, sand and moorum.

Fencing .- The line is unfenced.

Curves .- The sharpest curve is of 573 feet radius.

Gradients .- The ruling gradient is 1 in 60.

#### Terms of contract-

The line is worked under an agreement (between the Secretary of State and the Southern Mahratta Railway Company) sanctioned under Government of India, Public Works Department (Railways) No. 1144 R.T., dated the 26th December 1904.

The general conditions of the agreement are as follows :--

Government aid .- The line is the property of Government.

Currency of agreement.—The agreement is terminable at the close of any calendar half-year on twelve months' notice being given by either party.

Terms of working.—Actual cost with a lump sum charge of 11% annas per train-mile for locomotive and carriage and wagon expenses and for traffic expenses connected with subordinate superintendence, train staff, lighting and general stores, clothing, printing, stationery and tickets.

Rates and fares .- To be fixed from time to time by the Company with the approval of Government.

Based on actual receipts and payments during the year.

# History of railways constructed and in progress. (For Index see Page 112.)

Number Main head 22 Sub-heads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(b) Bellary-Rayadrug railway (3' Sa" gauge) -concld.

Itatistics of working-

-							<del></del>	 			TAT	SLE I.			TAI	SLE II.
			Cale	rubar	year	•		 	Capital ontlay to end of each year.	Gross Parnings.	Net carnings.	Percentage of net earnings on capital outlay.	Interest.	Gain or loss to the State.		Proportion of expenses to earnings.
1905 1906	:	:	:	:	:	:	•	•	Rs. 7,70,179 7,78,472	Rs. 17,010 37,9:8	Rs. 2,864 2,585	0.33	Rs. 14,102 26,771	Rs. —16,966 —24,236	Rs. 19 22	116·81 93·32

## 22 (c) Birur-Shimoga railway (3' 33" gauge)-

### Details of construction -

The line is 37.92 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

Balldst .- The line is ballasted throughout with stone and sand.

Fencing .- The line is unfenced except for a very short length.

Curves .- The sharpest curve is of 1,500 feet radius.

Gradients.-The ruling gradient is 1 in 89.

#### Terms of contract-

The Hindupur and Birur-Shimoga railways are worked under the following contract :-

Contract of -2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:--

Government aid .- The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysorc contract of the 31st August 1887 terminates. On the determination of the contract the Mysorc Covernment resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway, at a valuation.

Terms of working.—The working expenses of the system, excluding expenditure on New Minor Works, are divided between these railways and the others comprising the system in proportion to their gross carnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a Minor Work, subject to a maximum charge on such account of Rs. 20 per mile of line open in each balf-year), and pays the residue to the Mysere Durbar.

Rates and fares .- To be fixed from time to time by the Company with the approval of Government.

#### Statistics of working-

												TAUL	e I.		TABL	E IL
			(	Zalen	dar y	ear.					Capital outlay to end of each year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1896 1897	•	•	•		•	•	:		:	 :	Rs. 2,90,226 6,27,263	Re	Rq. 		Rs	
1898 1899 1898	:	:	:	•	;	:	:	:	:	•	15,70,079 20,85,475 22,94,457	6.186 66,227	1,881 21,219	0-09 1:06	 37 34	69·59 63·43
901 903 908 1904	:	:	•	:	:			:		•	24,01,338 24,05,667 24,07,802 24,04,391 23,98,543	62,058 64,606 61,520 68,224 80,672	16,993 28,967 24,206 24,624 31,103	0·71 0·97 1 01 1·02 1·30	81 38 31 35 41	72-62 63-83 80-65 63-90 61-45
906			•			,	٠.	•			23,94,973	1,11,176	14,989	1.88	56	59-55

#### 22(d) Guntakul-Mysore frontier railway (3' 3%" gauge) -

### Details of construction-

The line is 119.50 miles long. Its construction was sauctioned in 1889 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 411-lb. flat-flooted steel rails on steel trough sleepers.

Ballast .- The line is ballasted throughout with stone.

Foreing .- The line is partially fenced.

Curres .- The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

## History of railways constructed and in progress.

[For Index see page 112.]

 $Number \underbrace{ \frac{M \sin head}{Sub-heads} \frac{2S}{(a) \ to \ (m)}}_{Sub-heads} \cdot \quad SOUTHERN \ MAHRATTA \ RAILWAY \ SYSTEM-contd.$ 

22(d) Guntakul-Mysore frontier railway (3' 33" gauge)—concld.

#### Terms of contract-

The Guntakul-Mysore frontier railway is worked under the following contract:-

Contract of -21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of Government.

Currency of contract .- The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract .- The same as in the case of the Southern Mahratta railway.

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares. - To be fixed from time to time by the Company with the approval of Government.

## Statistics of working-

												Тав	LE I,			TABL	z II.
			Cal	enda	<b>х</b> уеа	г.				Capital outlay to end of cach year.	Gross carnings.	Net carnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1893 1894 1895	:	:	:	:	:	: .	:	:		Rs. 58,39,806 58,58,414 58,71,739	Rs. 1,97,874 3,68,951 4,39,329	Rs. 78,955 1,27,874 1,81,657	1:35 2:18 3:69	Rs. 4,67,933 2,31,529 2,31,639	Rs. -3,89,978 -1,66,655 -52,982	Ra. 38 59 71	60·00 65·34 58·65
1896 1897 18:48 1899 1900	:	:	:	:	:	:	:	:	:	59,00,158 59,02,198 58,98,666 58,98,608 50,00,016	4,80,992 6,38,278 4,25,792 3,84,829 4,30,116	2,10,690 2,75,983 1,32,471 1,28,459 1,57,837	3:57 4:68 2:25 2:18 2:68	2,85,666 2,36,000 2,86,026 2,35,996 2,35,960	24,926 + 39,983 1,03,555 1,07,537 78,123	77 108 69 62 70	56·20 56·76 69·88 66·62 63·81
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:		59,02,593 59,04,714 59,07,192 59,14,170 59,21,993	4,47,313 4,73,972 4,96,481 7,54,378 8,07,874	1,36,659 1,74,320 1,97,075 2,73,879 3,34,829	2:32 2:95 3:34 4:63 5:65	2,86,115 2,86,107 2,86,237 2,34,372 2,36,752	-99.456 -61,787 -89.152 +87.507 +93,077	73 76 80 191 130	69-45 63-22 60-31 63-69 53-55
1906										59,24,987	8,81,386	3,61,350	6 10	2,36,895	+1,21,455	142	\$9.00

# 22(c) Hindupur (Yesvantpur-Mysore frontier) railway (3' 3\frac{3}{3}" gauge)—Details of construction—

The line is 51.35 miles long. Its construction was sanctioned in 1890 and it was opened in 1893.

Permanent-way.—The rails on the ghat section are 50-lb. flat-footed steel, State railway type, and 414-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast.-The line is ballasted throughout with stone.

Fencing .- The line is fenced throughout.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway, 22 (c).

														TABLE	ī.		ТАВ	T.E II.
				C:	lond	ar ye	ar.						Capital outlay to end of each year.	Gross earnings.	Net curnings.	Per cent. on capital outlay.	Earnings per mile per weck.	Proportion of expenses to earnings.
1892													Rs.	Rs	Rs.		Rs.	
1893	•	•	•	•	•	•	•	•	•	•	•	•	24,41,741		***		***	
1891	•	•	•	•	•	•	•	•	•	•	•	•	24,46,186	57,695	22,708	0 93	39	60.60
	•	•	•	•	•	•	•	•	•	•	•		21,31,949	1,61,704	56.501	2.32	61	65.0G
1995	•	•	•	•	•	•	•	•	•	•	•	•	24,19,698	1,92,159	79,886	3.30	72	58.43
1896													23,94,762	2,23,900	99,592	4.16	84	55.50
1897	•			•	•								24,79,210	2,69,527	1,18,358	4.77	101	56:09
1898													24,98,316	1,80,081	56,430	2 26	67	68 66
1899													24,98,162	1,49,363	50,528	2.02	56	66·17
1900	•	•	•		•	•	•	•	•	•			24,98,047	1,88,183	67,135	2.69	70	61.32
1901											_		24,91,729	1,97,798	60,724	2.13	71	* 69:30
1902									-		·		24,97,811	2,13,486	77,908	3 12	80	
1903					·			- :			•	•	24,97,206	2,42,695	96,159	3.85	91	63.51
1904	-	-	-	-	•	•	•	•	•	•	•	•	24.83.812	3,67,923	1,33,715	5.37	138	60:38
1905	:	:	•	•	•	•	•	•	•	•	•	•					140	63.66
	•	•	•	•	•	•	•	•	•	•	•	•	24,88,944	8,73,993	1,54,872	622	190	59.59
1906	•	•	•	•	•	•	•	•	•	•	•		25,00,014	4,03,396	1,63,788	6.22	151	59.40

## History of railways constructed and in progress.

[For Index see page 112.]

Number  $rac{ ext{Main head 22}}{ ext{Sub-heads }(a) ext{ to }(n)}$ . SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

## 22(f) Hospet-Kottur railway (3' 33" gauge)—

The same remarks apply to this railway as are made against the Bellary-Rayadrug sailway, 22 (6). Details of construction-

The line is 48-03 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on pine, jamba and teak sleepers.

Ballast .- The line is being ballasted with gravel, stone and sand.

Fencing .- The line is unfenced.

Curves .- The sharpest curve is of 575 feet radius.

Gradients.—The ruling gradient is 1 in 60.

#### Terms of contract-

The same as apply to the Bellary-Rayadrug railway, 22 (b).

#### Statistics of working -

									TABLE	I.		4	TARL	R II.
	 •	Cal	lenda	r yea	r.		Capital outlay to oud of each year.	Gross carnings.	Net earnings.	Percentage on carital outlyy.	Interest,	Gam or loss to the State.	Enroings per mile per week.	Proportion of expenses to earnings.
1905 1906				•			R4 13.81,630 14.65,516	R : 29,230 51 892	Rs. -6.975 2 508	0.17	R4. 44,242 52,432	Rs55,21719,914	Кн 17 23	123186 2517

## 22(g) Kolhapur railway (3' 33" gange)-

## Details of construction --

The line is 20:27 miles long. Its construction was sanctioned in 1888 and it was opened in 1891.

Permanent-way.—The permanent-way consists of 411-lb, that to steel rails on steel trough sleepers.

Ballast.-The line is ballasted throughout with gravel and sand.

Fencing.—The line is unfonced except for a very short length.

Curves .- There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

## Terms of contract-

The Kolhapur railway is worked under the following contract:-

Contract of -17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the Kolhapur State.

Currency of contract .- The contract may be terminated, by either party on six months' notice.

Terms of working.—The working expenses of the system, excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a Minor Work, subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and farcs .- The same as in force on the Southern Mahratta railway.

												1		TABL	E 1.		Т∡в	. R 11.
				Ca	londa	ır ye	ar.						Capital ontlay to end of each year.	Gross earnings.	Net exrnings.	Per cent, on capital outlay	Earnings per mile per week.	Proportion of expenses to extraings.
1889	•			•		•		•				-	R4. 13,59,693	Rs.	Rs.		Rs.	
1890	•	•	•	•	•	•	•	•	•	••	•	• 1	21,37,699		•••			
1891 1892 1898 1894	:	:	:	:	:	:	:	:	•	:	:		21,16,183 28,81,946 23,21,687 23,05,817 23,60,206	58,381 90,793 1,88,096 1,23,390 1,21,147	20,866 29,182 49,991 43,132 51,006	0.90 1.23 2.15 1.89 2.15	60 55 78 82 80	64·26 67·72 57·67 64·64 57·90
1895 1896 1897 1898	:	:	:	:	:	:	:	:	:	:	:		23,05,912 22,21,837 23,24,807	1,21,655 94,630 78,271	54,305 41,981	2:95 1:80 1:04	80 63 52	55:36 55:34 69:0d
1899 1900	.:	:	:	:	:	:	:	:	:	:	:		23,24,807 23,24,807	99,195 1,24,215	21,201 33,986 41,875	1·46 1·93	66 82	65.74 68.87
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	:	•	:	:		23,24,807 23,25,587 23,26,188 23,24,251 28,26,251	1,14,114 1,23,918 1,21,957 1,41.676 1,70,404	35,750 46,407 48,058 53,228 <b>69,43</b> 2	1·54 2·00 2·07 2·29 2·98	75 81 80 93 112	68·67 62·55 60·60 62·43 59·25
1906	•	•	•	•	•	•	•	•	Ċ		•	Ċ	28,26,251	1,76,234	71,811	3.09	116	59 25

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

## 22(h) Mysore-Nanjangud railway (3' 3%" gauge)-

#### Details of construction-

The line is 15.80 miles long. It was opened in 1891.

Permanent-way.—The permanent-way consists of 411-lb. flat-footal steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing .- The line is partially fenced.

Curves.—The sharpest curve has a radius of 700 feet.

Gradients .- The ruling gradient is 1 in 100.

#### Terms of contract-

The Mysore-Nanjangud railway is worked under the following contract:-

Contract of -14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:-

Government aid .- The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysone contract of the 31st August 1857 terminates. On determination the Company makes over the Mysone Government the railway and works and pays to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. If mutually agreed upon, the working stores, to be taken over by the Mysone Government at a valuation.

Terms of working.—After deduction of expenditure on New Minor Works, which is debited to each railway 'direct from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares .- To be fixed by the Company with the approval of Government.

#### Statistics of working-

														Тавдя 1	•	619	TAn	LE II.
					Cale	ndur	year.						Capital outlay to end of each year.	Gross earmings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Propertion of expouses to cartings.
													Rq.	Rs. 16,478	Rs. 6,163	00	Rs.	1
1892	•	•	•	•	•	•		•	•	•	•	•	5,92,411		0,1/3	1.03	21	62:60
1893			•	•	•	•	•		•	•	•	•	6,15,551	33,812	14,01	2 26	43	55.59
1894					•	•	•	-	•	•	•	•	6,02,095	37,448	12,866	2 13	47	65.65
1895	•		•	•	•	•	•	•	•	•	•	•	6,09,212	39,100	16,132	5.69	49	57.98
1896		_	_										6,09,631	r <b>9,</b> 322	17,125	2.81	50	56.45
1897	-		Ţ.										6,31,764	83,197	14,265	2.25	42	57 41
1898	•	•	•										6,40,921	31,493	10,124	1.57	40	67.85
1899	•	•	•	•		-							6,46,051	16,810	5,671	0.88	21	66-20
1900	•		•	•	•			-	-				6,53,711	30,860	11,357	1.74	38	63 20
1900	•	•	•	•	•	•	•	•	•			•	.,,.	,,,,,,,	,		•00	03 20
1901							_						6,56,162	28,302	7,863	1.20	35	72-22
1902	•	•	•	•	•			-	·				6,56,163	29,870	10,938	1:67	36	63.78
	•	•	•	•	•	•	•	•	-				6,56,162	31,923	12 087	1.93	36 39	
1903	••	•	•	•	•	•	•	•	•	•			6,56 462	34,873	14,104	2.19	47	€0.26
1904	•	•	•	•		•	•	•	•	•	•		6,56,462	44,174	18,015	2.74	54	62 93
1905	•	•	•	•	•	•	•	•	•	•	•	•	0,00,402	19,174	10,013	3 /9	9	59 22
1906				_								.	6,56,462	19,916	20,559	3-13	61	58.81

## 22(i) Mysore Section (Southern Mahratta) (3' 33" gauge)-

### Details of construction-

The line, which connects Mysore with Haribar, is 296.22 miles long. First sanction to its construction was given in 1877 and it was opened through in 1839.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails, with the exception of about 25 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced.

Curves. - The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

#### Terms of contract-

The Mysore section is worked under the following contract:-

Contract of -31st August 1887 (between the Scoretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 Sub-heads (a) to (m). SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(i) Mysore Section (Southern Mahratta) (3' 33" gauge) -concld.

Terms of contract-concld.

The general conditions of the contract are as follows :-

Government aid.—Guarantee of interest in sterling at 4 per cent. on £1,200,000 dehenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys what-sever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.-Nil.

Terms of working.—After deducting working expenses, (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), the net receipts are divided in the proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

#### Statistics of working-

									TABLE I.				TA	вг.⊭ П.
	Ca	lend	ır yei	<b>1</b> F.		Capital outley to end of oach year.	Gro.48 ournings.	Net carnings.	Por cont. on rapital outlay.	Interest.	Company's share of net carnings. (Based on actual re coipts and payments during the year.)	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1879 . 1880 .	•	:	:	:	:	Rs. 7,98,213 21,37,736	Ra. 	Rå. 		Ra. 23,960 68,908	Вя. 	Rs. -23,960 -68,908	R4.	
1881 . 1882 . 1883 . 1884 . 1885 .	:	:	:	:	:	36,56,345 45,95,058 57,69,057 62,61,620 64,89,346	1,31,525 2,88,390 8,02,895 3,61,148 4,33,954	53,753 1,63,495 99,675 1,65,479 2,07,784	1·47 2·25 1·73 2·64 3·20	98,919 1,68,949 2,19,851 2,41,052 2,51,730	   	-45,159 -65,494 -1,19,676 -75,573 -48,946	51 68 67 67 60	59·13 64·11 67·09 54·22 52·12
1886 . 1887 . 1888 . 1889 .	:	:	:	:	:	71,35,111 91,36,438 1,25,76,69 1,44,24,093 1,47,11,610	4,69,274 1,13,784 5,70,657 8,96,273 11,56,318	1,05,385 1,41,198 12,295 2,22,034 2,61,700	1·18 1·55 0·43 1·54 0·02	5,57,104 6,70,864 6,94,210 7,07,500 6,48,733	47,964 52,831	-1,51,719 -5,29,666 -6,41,915 -5,33,380 -4,39,864	65 71 79 72 77	59:04 71:60 76:28 75:23 77:9 <b>4</b>
1891 . 1892 . 1893 . 1894 . 1895 .	:	:	:	:	:	1,50,76,285 1,46,36,205 1,46,42,217 1,47,60,293 1,49,22,452	13,24,525 13,99,463 16,83,203 14,45,412 15,78,281	4,43,717 4,47,906 6,74,705 4,76,156 6,00,769	2:94 3:06 4:61 3 23 4:23	6,54,850 7,29,624 7,70,489 8,38,525 8,70,947	96,004 1,01,305 1,64,670 1,43,566 1,23,096	-3,07,187 -3,83,023 -2,60,404 -5,05,935 -3,63,274	86 89 109 <b>94</b> 103	66-50 67-92 69-92 66-99 59-72
1896 · 1897 · 1898 · 1899 · 1900 ·	:	:	:	:	:	1,51,08,257 1,51,99,757 1,55,07,319 1,56,75,416 1,58,70,510	15,84,981 18,80,019 18,92,851 10,60,469 13,76,391	6,76,873 7,95,147 4,13,121 2,29,033 4,71,101	4·48 5·23 2·67 2·10 2·97	8,21,588 7,75,768 7,38,461 7,21,117 7,18,200	1,71,768 1,80,092 1,66,986 76,861 1,11,070	-3,16,488 -1,61,553 -4,92,026 -4,68,945 -3,58,069	103 122 90 69 89	57:29 57:54 70:32 68:97 65:77
1901 . 1902 • 1903 • 1904 .	•	:	:	:	:	1.60,14 879 1 60,76,009 1,62,34,903 1,62,59,794 1,64,78,981	14,33,240 15,97,046 15,35,270 15,85,324 17,90,901	4,07,791 5,58 082 5,82,298 5,63,667 6,98,051	2·55 3·47 3·59 3·17 4·24	7,22 224 7,21,062 7,20,000 7,20,000 7,20,000	1,07,697 1,16,979 1,46,8:6 1,52,391 1,37,682	-4,22,150 -2,70,959 -2,84,598 -3,08,724 -1,59,631	93 104 100 103 116	71:55 65:00 62:07 64:14 61 02
1906 .						1.65,59.502	18,48.348	7,19.072	4:34	7,20.000	1,97,286	-1,98,214	120	61.10

## 22(j) West of India Portuguese railway (3' 3\sqrt{gauge}) --

Chairman.—Sir Henry Green, K.C.S.I., C.B. Secretary.—II. Ringler-Thomson, Esq.

Offices .- 4 Coleman Street, London, E.C.

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

#### Details of construction-

The line runs from the Portuguese frontier to Mormugao, and is 51·10 miles long. Its construction was sanctioned in 1881 and it was opened through in 1888.

Permanent-way.—The permanent-way throughout consists of 62-lb. flat-footed stoel rails on creosoted pine, sal, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fenoing .- The line is partially fenced.

Curves .- The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

# History of railways constructed and in progress. [For Index see page 112.]

Number  $\frac{\text{Main head } 22}{\text{Sub-heads } (a) \text{ to } (m)}$ .

SOUTHERN MAHRATTA RAILWAY SYSTEM-contd.

22 (j) West of India Portuguese railway (3' 3\frac{3}{3}"gauge)—concld.

Terms of contracts-

The West of India Portuguese railway is worked under the following contracts:-

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugae and a railway from Mormugae to the Portuguese Frentier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese
Railway Company for the maintenance and working of the railway from Mormugao to
the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows :-

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent. on £550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, ctc.

The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, tolegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies, which took effect from the 1st July 1902, is to continue in force for five years, subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract.—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six menths' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract the Portuguese Government are to pay to the Company in stering an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and the Southern Mahratta railways are worked as one concern, and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) are divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government—towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance, plus 10 per cent, thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

														TA	BLE I.		TAB	LE II.
				Ca	londs	er y	ear.						Capital outlay (in- olading outlay on Harbour works) to end of cach year.	Gross carnings,	Net earnings.	Per cent, on capital outlay.	Enrnings per mila per week.	Proportion of expenses to earnings.
1890													Rs. 1,68,14,170	Rн. 4,75,437	Rs. 67,001	0.41	Re. 138	74-24
1891 1892 1893 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	1,63,32,139 1,63,00,901 1,62,74,816 1,63,12,813 1,68,31,963	5,41,014 8,74,681 5,86,705 5,48,673 5,83,077	1,21,583 11,107 1,65,069 1,19,332 1,12,186	0·74 0·07 1·01 0·73 0 69	157 109 168 157 166	86:01 106:01 78:18 86:47 90:75
1896 1897 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	•	1,63,80,444 1,63,40,168 1,62,97,448 1,62,96,432 1,63,29,262	2,97,176 1,79,722 2,20,870 5,72,475 5,83,596	-78,893 -1,00,785 -1,10,145 1,64,665 -66,845	::: :: ï·01	90 55 65 157 96	187:34 189:46 173:60 83:15 120:04
1901 1902 1903 1904 1905 1906	:	:	:::::::::::::::::::::::::::::::::::::::	:	:	:	:	:	:	:	:		1,63,42,023 1,63,08,793 1,63,08,793 1,63,05,793 1,63,90,269 1,63,90,269	7,68,120 3,54,657 3,96,295 4,69,786 4,44,519 4,38,965	-48,580 51,887 1,51,112 1,83,414 1,77,958 1,73,268	 0°37 1°10 1°33 1°29 1 26	205 183 149 184 167 165	113-20 85-51 61-86 62-55 50-97 60-58

## History of railways constructed and in progress. [For Index see page 112.]

Number Main head 22 Southern MAHRATTA RAILWAY SYSTEM—concld.

22 (\*) Bezwada-Masulipatam (3' 3%" gauge)—
This railway will be 49:47 miles long. It was sanctioned in 1905 and is under construction.

22 (1) Kurnool Road-Kurnool (3' 34" gauge)-

The construction of this line has been sanctioned with the object of providing facilities for the distribution of grain to the population of the Madras Presidency, and of lessening difficulties incidental to the period of scarcity.

The line will be 32 miles long. It was sanctioned in 1906 and is under construction.

22 (m) Sangli (3' 3\frac{3''}{2}'' gauge)—
This railway (Miraj Junction to Sangli town) will be 5.77 miles long. Its construction from funds supplied by the Sangli Durbar was sanctioned in 1905. , · •

Number

Main head 29 UDAIPUR-CHITOR RAILWAY (3' 3%" gaugo) -Hub-boud (a)

Running powers-

Home line over Foreign line :-

Miles.

Rajputana-Malwa railway, Ber ch Signal Station to Chitorgarh.

1.42

The line is owned by the Udaipur State. It was a riked by the Bombay, Baroda and Central India railway as a temporary measure up to the 31st December 1897, since which date it has been worked by the Udaipur State. Details of construction-

The line is 67:30 miles long. Its construction was structioned in 1894 and it was opened through in 1899.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails laid on deodar sleepers.

Ballost. The ballast consists of broken stone.

Fencing .- The line is fenced round static as only.

Curves.—On the Berach-Deba is a distribute sharpest curve is of 1,116 feet radius; and on the extension from Debari to the Ahr river near Udaipur, at the about the sharpest curve has a radius of 820 feet.

Gradients.-The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Terms of contract-

The line is owned and worked by the Udaipur State.

Statistics of working-

																	Tabl	n I.		TAB	LR II.
					•	Calor	ndar	year								Capital outlay to and of each year.	Gross oarnings.	Net earnings.	Per cent. on expital outlay.	Exraings per mile per week.	Proportion of oursons to carongs.
		·~ · · · ·		**											~-~	Rs.	Rs.	Rs.	warmen in the first	Ba	
1898 1894 1895	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	7,000 2,70,472 13,39,850	 54,762	  18,778	  1·40	 42	   
189 <b>6</b> 189 <b>7</b> 1898 1899 1900	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	19,89,912	1,35,219 1,23,175 1,40,822 2,10,540 3,17,528	59,750 49,881 61,364 1,01,829 1,85,703	3:44 2:68 3:43 5:27 9:38	39 46 62	60:25 65:15 57:83 50:21 41:50
1901 1902 1903 1904 1905	:	:	:	:	:	:	:	· :	:	:	:	:	:	:	:	20,61,858 20,65,600 20,66,171 20,66,003 29,67,164	2,22,175 2,17,388 1,77,817 1,51,293 2,07,927	94,112 97,131 66,446 53,175 1,03,552	4·56 4·70 3·21 2·57 5·00	, 62 51 43	57:63: 55:32 62:63 64:86 50:19
1906			•									,				20,7.,667	2,47,813	1,35,467	6.52	71	45-33

Number Main hoad 24 Sub-head (a) BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—

Details of construction-

The line is 26:06 miles long. Its construction was sanctioned in 1905 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on pyinkado, sal and Australian jarrah wood sleepers.

Ballast.-The line is ballasted with broken brick.

Foncing .- The line is unfenced.

Curves. - The sharpest curve has a radius of 400 feet.

Gradients .- The ruling gradient is 1 in 250.

Terras of contract-

The line is worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement: Agreement -of 14th December 1807 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light

Railway Company).

The general conditions are as follows:

Aid by District Board .- The District Board guarantees such an annual subsidy as will make the not profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and allows the free use of a width of not more than 8 feet along one side of the District road. (The Company to acquire at its own expense land necessary for stations and diversions.)

Currency of agreement.—Upon the expiration of twenty-one years from the date of the order authorising the con-struction, by giving six months notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding, together with a bonus

of twenty per cent. thereon.

## History of railways constructed and in progress. [For Index the page 112.]

Number Main head 24. BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—concla

Terms of contract-concid.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital plus not more than 4 per cent. on debenture capital are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company may vary its rates.

Statistics of working-

•	•		•	Table 1.				TABL	s II.
Calondar year,	Capital outlay to end of each year.		Net earnings.	Por cent. on capital outlay.	Subsidy from District Board.	Totel income.	Percentago of total in- come on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1905 1906	Rs. 9,06,310 9,47,058	Rs. 1,11,202 1,50,731	Rs. 55,675 79,488	6 07 8 39	5.394 12,669	Rs. 50,281 <b>66,</b> 819	Rs. 5:55 7:06	Rq. 90 111	49.93 47.26

Main head 25 Sub-head (a). BARSI LIGHT RAILWAY (2' 6" gauge)—

Chairman.—Sir Alexander Wilson. Secretaries — W. A. Browne & Co.

Offices.-Winchester House, Old Broad Street, E. C.

#### Details of construction-

The open mileage of the Barsi Light railway is 78:50 miles. It is made up of the following:—
(1) Main line, Barsi Road Junction to Barsi Town, 21:59 miles;

Tadwale extension, Barsi Town to Tadwale, 26.70 miles; and

(3) Pandharpur extension, Barsi Road Junction to Pandharpur, 30:21 miles.

The main line was sanctioned in 1895 and opened in 1897 and the Tadwale and Pandharpur extensions were sanctioned in 1902 and opened in 1906.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballust .- The line is ballasted with stone and moorum.

Fencing.—The line is unferced, except for a short distance on either side of level crossings and at bridges. Barsi Road Junction, Barsi Town, Tadwale and Pandharpur stations are also fenced, Curves.—The sharpest curve—is of 450 feet radius.

Gradients.-The ruling gradient is 1 in 100. There are, however, two stoeper gradients on the main line-one of 1 in 89 and one of 1 in 90; and two on the Tadwale extension-one of 1 in 50 and the other of 1 in 70.

#### Torms of contracts-

The Barsi Light railway is worked under the following contracts:-

Contracts of -1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the live from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

4th December 1905, supplemental to that of 26th August 1902.

Despatch-from Secretary of State, No. 51 Railway, dated the 8th July 1904, regarding the grant of extension of the term at the end of which the option of purchase may be exercised.

The general conditions are as follows:-

Government aid .- The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction

stations. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contracts on the 1st January 1944, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined Government are to pay the Company in England in sterling an amount equal to the total paid up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts .- Nil.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

											TABLE	ĭ.	·	TABL	u II.
				Caler	ıdar :	year.				Capital outla to end of each year.	Gross carnings.	Net carnings,	For cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1895	•									Rs. 2,357	Ba.	Rs.	·	Ra.	100
1896 1897 1898 1809	:	:	•	:	:	:	:	:	:	10,08,657 13,43,991 13,42,592 13,56,800 13,50,501	1,07,778 1,30,991 1,56,118 1,21,440	21,560 24,559 64,175 42,140	1 60 1 83 4 75 3 13	115 116 139 111	80.00 81.15 58.63 65.90
90) 902 908 904 905	:	*	:	•	:	•	•	:	:	12,99,589 13,18,242 12,59,175 13,18,299 28,13,907	1,68,238 1,50,275 1,30,694 - 1,66,934 2,19,478	79,588 52,979 53,423 64,952 1,39,618	613 403 424 493 496	150 134 116 149 195	52·69 64·81 59·12 61·09 36·39
906			:	:	:					. 39,41,807	2,19,884	1,09,862	2.78	96	49-90

## History of railways constructed and in progress.

[For Index see page 112.]

#### Number Main head 26 Sub-head (a) BUKHTIARPORE-BEHAR LIGHT RAILWAY (2' 6" gauge)-

The line, which has been laid as far as possible on the District road, is 1850 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

#### Details of construction-

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on pyinkado sleepers.

Ballast .- The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves .- The sharpest curve has a radius of 260 feet.

Gradients .- The grades are easy, except at bridge approaches and up through the village of Chero where the grade is 1 in 100.

#### Terms of contract-

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:--

Agreement of --- 21st August 1899 (between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

The general conditions are as fellows :--

Government aid .- In addition to land, which has been provided free of charge except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, 111 of 1883, viz., upon the expiration of twenty-one years from the date of the order of the Local Government, authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction together with a bonus of 20 per cent thereon.

Terms of working .- Any surplus profits in exacts of 1 per cent. on share capital, plus not more than 4 per cent. on debenture capital, are equally divided between the District Board and the Company.

Rates and fares .-- Certain maxima have been fixed within which the Company is permitted to vary rates,

#### Statistics of working-

											TAULE 1.				Тлв	n II.
<u> </u>			(	Calon	idar ;	year.					Capital outlay to end of each year.	Gross cornings.	Net carnings.	Per cent. on capital outlay	Earnings per wile per week.	Proportion of expenses to carnings.
1903 . 1904 . 1905 . 1906 .	•	•	•	:	:	:	:	:	:	:	Rs. 7,47,838 8,10,059 8,11,098 8,00,262	Rs. 35,800 1,13,590 88,661 1,11,324	Rs. 15,120 65,963 35,440 48,080	2:16 8 14 4 37 5 79	Re 74 181 92 116	57·77 41 90 60 03 50·81

Number Main head 27 Subshead (a) . CUTCH STATE RAILWAY (2' 6" gauge)—

#### Details of construction-

The mileage of the open line (Tuna to Aujar) is 11.67 miles. Its construction was sanctioned in 1903 and it was opened in 1905.

There are, in addition, 27 38 miles (Anjar to Bhuj) under construction.

Permanent-way. - The permanent-way consists of 30-lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast .- The line is ballasted with stone.

Fencing.—The line is unfenced.
Curres.—The sharpest curve is of 359 feet radius.

Gradients .- The ruling gradient is 1 in 200.

### Terms of contract-

Nil. The line is owned and worked by the Cutch State.

-									т	`ABL	r I.					TABL	n II.
	 		C	ulend	ar ye	ear.						Capital outlay to end of each year.	Gross oarnings.	Net earnings,	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	 		-									Rs.	Rs.	Rs.	,	Rs.	
1905		٠		•		•	•	•	•	•		4,25,731	22,367	15,861	3.72	59	29.07
1906				•					•	•	•	7,18,667	40,273	19,919	2.77	68	50-54
	 																, I

## History of railways constructed and in progress. [For Index see page 112.]

Number Sub-head (a) DHOLPUR-BARI RAILWAY (2' 6" gauge)-

#### Details of construction-

This line, from Dholpur on the Indian Midland railway to Bari, was sanctioned in 1905 and is under construction by and at the cost of, the Dholpur State. It will be 19:25 miles long.

#### Terms of contract-

Nil. When open, the line will be maintained and worked by the Durbar.

Number Main head 29 DWARA-THERRIA LIGHT RAILWAY (2' 6" gauge)

#### Details of construction-

The line will be 1950 miles long. Its construction was sanctioned in 1902.

The construction of this line, which was suspended in June 1904 for want of funds, continues at a standstill, the company being unable to raise the funds necessary for its completion.

#### Terms of contract-

The Dwara-Therria Light railway on completion is to be worked under-

Terms. - Contained in the Notification issued by the Chief Commissioner of Assam under letter No. 44, dated the 14th August 1902.

The general conditions are as follows:-

Government aid.—Guarantee of interest at 4 per cent. per annum for 10 years on a debenture loan of 4 lakhs of rupees, required to complete the Dwara-Maolong section. Land to be provided free of cost.

Currency of contract.—The Sceretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract and take over the railway with all its equipments, years and property, upon giving two years' previous notice, on paying twenty-five times the average yearly net carnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares .- Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Local Government.

# Number Main hoad 30 sub-hoad (a). KALKA-SIMLA RAILWAY (2' 6" gauge)—

Chairman.—Colonel Alexander Jerome Filgate, R.E.

Secretary .- C. E. Rutter, Esq.

Offices .- 17, Victoria Street, Westminster, S. W.

The railway was constructed by the Delhi-Umballa-Kaika Railway Company.

On the representations of the Delhi-Umballa-Kalka Railway Company it was decided to purchase the line for £300,000, the Secretary of State waiving all claims of arrears of unpaid interest on the advances made to the company. The purchase of the line by the State was effected from 1st January 1906; but the company continued to work it under the direct orders of the Railway Board up to the 31st December 1908. It was made over to the North Western (State) railway admi-

#### Details of construction -

The line is 59.44 miles long. Its construction was sanctioned in 1898 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 411-lb. flat-footed steel rails on wooden sleepers.

Ballast.-The line is ballasted with stone.

Fencing .- The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves .- Most of the curves are compound, the limiting radius being 120 feet.

Gradients.—The ruling gradient is 1 in 33.

Terms of contract-Nil. The line is owned by the State.

Rates and fares .- Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunuels, rates may be varied within the maxima and minima.

										_		T	BL	e I.				TABI	m Ir.
					Ca	dond	ur ye	er.						Capital outlay to end of each year.	Gross carnings.	Net carnings.	Por cont, on capital outlay.	Farnings per mile per week.	Proportion of expenses to earnings.
890 800	:	:	:	•		:	:	:	:	:	:	:	:	Rs. 5,53,228 13,18,465	Rs,	Rs		Rs	•••
001 008 008 004 005		:	:	:	:::::::::::::::::::::::::::::::::::::::	``	:	:	:	:	:	:	:	34,86,093 92,81,656 1,41,32,884 1,68,25,519 1,76,11,644 1,63,06,436	33,052 5,90,403 7,52,460 7,61,322	7,022 2,08,240 4,00,613 8,07,125	 0.04 1.24 2.28 1.88	7 191 243 247	78:09 64:75 46:73 59:62

# History of Railways constructed and in progress. [For Index see page 112.]

Number Main head 31 SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2'6" gauge)—

#### Details of construction-

The line will be 125 miles long, viz., (1) main line (Shahdara to Saharanpur) 95 miles and (2) branch (Baraut to Meerut) 30 miles.

Its construction and working by Messrs. Martin and Company of Calcutta was authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh,  $\frac{339}{187}$  R., dated the 18th April 1904, and a company, styled the Shahdara (Delhi)-Saharanpur Light Railway Company, was registered on the 28th November 1905 for the purpose of constructing the line.

Only the main line is under construction.

#### Terms of contract -

The line will be worked under the following agreement :-

Agreement of—11th October 1905 (between the Government of the United Provinces of Agra and Oudh and Messrs. Martin and Company).

The general conditions are as follows:-

Government aid.—Free grant of land for a single 5' 6" gauge line and for all conveniences and works.

Currency of agreement.—The Secretary of State will have the right to terminate the contract 21 years after the date of opening or 23 years after the date of the Government letter sanctioning the construction of the tramway, whichever is earlier, at 25 years' purchase of the annual profits to the Company for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25 per cent. in excess of that sum. This option, if not exercised at the time mentioned, may be exercised at the end of successive periods of 7 years counting from that date. In the event of its being determined to construct a railway on a different gauge in place of the tramway and if the Government and the Company fail to agree that the alteration shall be made by the Company, then the Government will have the right to acquire the tramway at any time on 12 months' notice at 25 per cent. in excess of the Company's capital expenditure.

Terms of working.—Whenever the net profits of the tramway shall be in excess of 4 per cent. upon the paid up capital of the company, such surplus profits shall, after setting aside such reasonable sum as the directors of the company may deem proper to carry forward, be equally divided between the Government and the company.

Rates and fares .- Certain maxima have been fixed.

# Number Main head 32 . TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—

## Dotails of construction-

The line is 33.27 miles long, viz.:—from Magra to Tarakeshwar (31.12 miles) and from Magra to Tribeni (2.15 miles). Its construction was sanctioned in 1891 and the two sections were opened in 1895 and 1994, respectively.

Permanent-way.—The permanent-way of the main line consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pyinkado sleepers.

The Tribeni extension is laid on sal sleepers.

Ballast.—Sand and broken brick. Fencing.—The line is partially fenced.

Curres .- The sharpest curve is of 716.25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; from the bridge under the East Indian railway to Magragunj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

#### Torms of contracts-

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896, under the following agreements:—

Agreement of-16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Com-

pany).
12th March 1904 (between the Secretary of State for India and the Company).

The general conditions are as follows :-

Government and .- Free grant of land for the Tribeni extension.

Currency of agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 11 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

											T	BLE	I.				TABI	E II.
				C	alend	lar y	oar.					-	Capital outlay to end of each year.	Gross carnings.	Net earnings.	Per cont. on capital outlay.	Farnings per mile per week.	Proportion of expenses to carnings.
1898 1899 1900	:	:	:	:	:	•	:	:	:	:	:	:	Rs. 9,44,627 9,62,446 9,61,811	Ra. 74,074 66,168 76,594	Rs. 21,002 12,192 20,961	2·22 1·27 2·18	Rs. 46 41 47	71·65 81·58 72·63
1901 1902 1943 1904 1905 1906	:	:	:	:	:	:	:	:	:	:	:		9,72,175 9,76,194 10,15,987 10,44,975 10,46,674 10,73,087	83,150 84,272 85,546 89,735 86,688 1,00,072	19,890 24,842 25,350 27,564 21,679 82,762	2·04 2·54 2·50 2·63 2·07 3·05	51 52 53 52 50 , 58	70·23 70·52 70·57 69·28 74·81 67·26

## History of railways constructed and in progress. [For Index see page 112.]

## Number Main head 33 Sub-head (a). TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 185, was applied to the line.

A tramway constructed at the expense of the Borjuli Tea Company connects the Borjuli Tea Factory with Rangapara station on the Texpore-Balipara Light railway. The tramway is 2 miles long and is worked by the Texpore-Balipara Light railway. It is used for passenger and goods traffic. Details of construction-

The line is 20:10 miles long. Its construction was sanctioned in 1894 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on nahor sleepers.

Ballast .- The line is unballasted.

Fencing.—The line is fenced only at stations.

Curres.—In the first mile there are two curves with radii of 500 feet.

Gradients .- The ruling gradient between Tezpore and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100.

#### Terms of contract-

The Tezpore-Balipara Light railway is maintained and worked under-

Terms-contained in the Notification issued by the Chief Commissioner of Assam under letter No. 33, dated the 1st June 1895.

The general conditions are as follows :-

Government aid .- Free use of Government land and a subsidy to the extent of Rs. 5,000, up to the end of March 1909, from the Local Board at Tezpore.

Currency of contract.—The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent, over and above such value.

Terms of working.—The line is worked by the owning company. Rates and fares.—Certain rates and fares have been fixed.

## Statistics of working-

			TARLY J	•				TABL	E II.
Calendar year.	Capital outlay to end of cach year.	Gross carnings.	Net. carungs.	Per cent on capital outluy.	Subsidy from District Board.	Total income.	Per cent. of total ir come on capital outlay.	Earnings per mile per week.	Proportion of expenses to carnings.
1898	18a, 4,50,927 4,74,127 4,87,449 4,87,240 4,87,240 4,87,10 4,87,240 4,87,240 4,87,210	Rs. F5,745 95,157 95,951 83,410 85,012 94,742 £8,463 1,03,950 1,14,740	Ra. 20,157 26,156 25,797 16,898 21,651 27,739 17,291 27,052 34,076	4:41 5:52 5:29 5:47 4:48 5:67 3:54 5:55 7:17	Rs., 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000	Rs. 25,157 81,156 30,797 21,895 26,651 07,730 22,291 32,982 39,076	5·51 0·57 6·32 4·49 5·47 6·71 4·57 6 4·8 8·20	Rs. 82 91 92 80 81 91 85 99	76 49 72 51 73 12 72 84 74 33 70 73 80 43 78 80 69 51

#### Number Main head 34 Sub-hond (a) THATON-DUYINZAIK LIGHT RAILWAY (2' 6" gauge)-

The line is 7.76 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent way .- The permanent-way consists of 20-lb. flat-footed steel rails on Dick Kerr's patent iron and pyinkado sleepers.

Ballust. The line is ballasted throughout with sand, stone and laterite. Fencing. The line is unfenced.

Curres. - The sharpest curve has a radius of 207 feet.

Gradients.—The raling gradient is 1 in 80.

#### Terms of contracts-

The Thaton-Duyinzaik Light railway is worked under the following :-

Contract of-10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of-6th June 1896 for working the railway and a stram launch service between Moulmoin and Duyinzaik.

The general conditions are as follows:-

Government aid .- Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensom for the carriage of mails between Moulmein and Thaton, vid Duyinzaik, including both steamer and railway journeys.

Currency of contract .- The contract is in force for a period of 99 years. After the railway has been open for 80 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway apon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

Terms of working .- The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

Rates and fares .- Certain maxima have been fixed within which the proprietors are permitted to vary the rates. Statistics of working -Information not available.

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 35 . DARJEELING-HIMALAYAN RAILWAY (2'0" gauge)—

#### Details of construction-

The line, which is laid for a great part of its length along the cart road, is 51 miles long. Its construction was sanctioned in 1879 and it was opened through in 1881.

Permanent-way.—The section of the line in the plains is laid with 41½-lb. flat-footed steel rails on wooden sleepers. The hill section was laid with 41½-lb. flat-footed steel rails, these are being renewed with a special section steel rail, 41½ lb. to a yard.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

Fencing .- The line is unfenced.

Curves.-The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukhua to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

#### Terms of contract-

The railway is worked under the following contract :-

Contract of -8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage) for construction, maintenance and working.

The general conditions of the contract are as follows:-

Government aid.—Government undertake to pay the Company such a sum as will make up its gross receipts to two lakes of rupees annually. Government land and the use of the exi-ting cart road were granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to it for permanent improvements to the road or works connected therewith. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment, with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract .- Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the not profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one molety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates. Statistics of working—

						TABLE I.					TAR	LE II.
Cal	nda	r yes	ır.	Capital outlay to oud of each year.	Grosa carnings.	Net carnings.	Per cent of not carnings on capital outlay.	Subsidy from Local Government,	Total income.	Por cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1880 1881 1882 1688 1884	:	:		Rs. 12,32,894 18,18,723 23,56,112 26,50,799 27,23,240 27,27,823	Rs. 49,483 2,61,154 3,66,474 4,21,944 4,35,024	Rs. 34,197 1,15,522 1,21,983 1,55,725 1,46,765	2:77 6:35 5:17 5:87 5:30	Rs	Rs. 34,197 1,15,522 1,21,083 1,55,725 1,46,765	2·77 6·35 5·17 5·87 5·39	Rs. 82 103 141 162 167	29·46 55·76 66·72 63·11 66·26
1886 1887 1888 1869	•	:		27,32,136 27,43,214 27,71,926 29,40,423 29,52,108	4,96,176 4,77,151 6,14,893 8,74,294 5,76,436	2,11,550 2,10,623 2,83,327 2,20,117 2,32,894	8:86 7:63 10:22 7:80		2,41,559 2,10,623 2,83,327 2,20,117 2,32,894	8 86 7-63 10-22 7-80 7-89	188 180 180 233 217	51·28 55·86 53·92 60·10
1890 1891 1892 1898 1894	:	:	:	30,50,693 31,09,079 31,72,223 81,77,536	6,13,387 6,35,778 6,34,181 6,36,284	2,58,253 2,66,647 2,83,903 2,56,286	8:44 8:57 8:50 8:10		2,58,253 2,66,647 1,28,495 2,26,530	8:44 8:57 4:02 7:13	231 240 239 239	59.60 57.61 57.46 55.41 59.27
1895 1896 1897 1898 1899	:	:	:	31,99,765 33,12,782 33,15,455 38,65,998 35,08,469	7,39,618 7,81,594 7,44,266 7,54,580 7,14,985	3,59,933 3,69,607 3,88,188 3,41,109 2,49,770	11.25 10.25 10.05 10.18 7.12	-61,740 -62,087 -55,929 -50,432 -34,938	2,97,580 2,77,259 2,81,677 2,14,887	9:32 8:98 8:36 8:37 6:12	279 294 291 285 270	50:92 53:98 55:28 54:79 65:07
1900 1901 1902 1903 1904 1905	:	:	:	34,99,487 34,78,411 34,96,607 36,18,058 37,38,486 37,51,562 37,43,284	8,09,188 7,87,941 8,50,280 9,61,602 10,45,187 9,72,644 9,50,351	3,61,840 3,13,861 3,78,005 4,16,752 4,75,327 4,09,514 4,02,843	10:34 9:02 10:18 11:54 12:71 10:91 10:76	-64,268 -49,971 -67,704 -79,226 -97,226 -77,621 -75,126	2,63,890 3,10,301 8,37,526 3,78,027 3,31,893	8:50 7:58 8:83 8:79 10:11 8:47 8:75	305 297 321 368 894 367 870	55-28 60-17 54-66 56-65 53-46 57-70 58-91

History of railways constructed and in progress.

[For Index see page 112]

Number Main head 36 Sub-head (a). HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—

#### Running Powers-

Foreign line over Home line :-

Howrah-Sheakhala light railway, Telkul Ghat to Kadamtala, (for passenger and goods trains) 2:00 miles.

#### Details of construction-

There are 37:19 miles of open line, viz., main line (Telkul Ghat to Amta), 27:19 miles, and branch (Bargachia to Autpur), 10 miles. In addition to these 12:50 miles were sanctioned for construction in 1902, but the comme coment of work has not yet been authorized. The construction of the main line was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, on cross sleepers of pyinkado.

Ballast .- The line is ballasted throughout.

Fencing .- The line is unfenced.

Curves. - The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 141 feet.

Gradients. - The line is practically level throughout.

#### Terms of contracts-

The Howrah-Amta Light railway is worked on the terms contained in the Bengal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bougal District Road Tramways Company, Howrah-Amta).

16th August 1901 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows :-

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of a width of 6 feet along one side of the district road, granted to the Company for the purpose of laying the line, a clear width of 11 feet being left for vehicular traffic

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Cods), the value to be placed upon the railway is to be calculated by adding to the value of the while undertaking, with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates. Statistics of working—

					_	TABLE	I.				TAB	La II.
Cal	ends	r ye	ır.	Capital outlay to end of each year.	Gross earnings.	Net carnings.	Percent of net carnings on capital outlay.	Subsidy from Pistriot Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to caroings.
				Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898				11,24,713	1,89,519	78,910	7.02	15,062	63,848	2.08	152	58-86
1899		*,#		11,41,307	2,50,763	1,12,794	9.88	-27,835	84,959	7.44	168	55.02
1900				11,88,283	2,58,418	1,23,104	10.86	-80,244	92,860	7.81	172	51.99
1901		•		11,96,697	2,60,530	1,14,092	9.23	26,146	87,936	7:35	175	56-21
1902				12,68,532	2,65,497	1,88,120	10.49	- 29,703	13,417	8.12	178	49.86
1903				12,88,853	2,77,451	1,37,883	10.69	-31,883	1,05,950	8-22	186	50:33
1904				15,91,821	2,97,062	1,54,998	974	- 35,416	1,19,582	7:51	170	7.82
905				16,07,464	8,28,723	1,77 464	11:04	-38,862	1,38,602	8.62	170	46.01
1906				17,90,006	8,51,462	1,77,670	9-98	-38,681	1,38,989	7.76	182	49.45

## History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 97

HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)-

#### Running powers-

Home line over Foreign line :-

Telkul Ghat to Kadamtala, Howrah-Amta Light railway, (for passenger and goods trains) miles 2:00.

#### Details of construction-

The line is 19:75 miles long. viz., main line (Kadamtala to Sheekhala), 17:38 miles, and Chanditala-Janai branch 2:37 miles. The construction of the main line was sauctioned in 1895 and it was opened in 1897.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, laid on cross sleepers of pyinkado.

Ballast. - The line is ballasted throughout.

Fencing .- The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients .- The line is practically level throughout.

#### Terms of contracts-

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government Notification No. 112, dated the 26th March 1895, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Hooghly and the Bengal District Road Tramways Company).

The general conditions are as follows :-

Aid by the District Board.—The District Board of Hooghly have guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. The free use of a width of 6 feet along one side of the district read, has been granted to the company for the purpose of laying the line, provided that there shall nowhere be a less width of metalled road clear of the inner rail of the line than 16 feet.

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Boards exercising, in conjunction with the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted a bonus of 15 per cent, over and above such value.

Terms of working.—Whenever the net earnings of the company are in excess of 1 per cent. upon the capital of the company actually paid up and expended for the time being, surplus profits are divided between the company and the District Board of Hooghly in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and farcs. -- Certain maxima have been fixed within which the Company is permitted to vary rates.

Calendar year.   Cale	-								Таз	st. <b>m</b> 1.					TABL	s II.
1898		Ca	lend	ar yo	ar.			to end of	Gross		of not earnings on capital	from . District		of total income on cupital	por mile	Proportion of expenses to carnings,
1899								Rs.	Ra.	Rs.		Rs.	Rs.		Rs.	
1900 6,09,446 76,010 26,824 4·40 —999 25,825 4·24 74.  1901 6,09,446 75,579 23,165 3·80 1,108 24,273 3·88 77  1902 6,09,565 82,019 31,739 5·20 —550 31,189 5·12 80  1908 6,14,715 87,040 74,950 5·68 —668 34,282 5·57 85  1904 6,14,715 86,261 39,055 6·35 —2,747 36,308 5·91 84  1905 6,13,008 88,266 38,128 6·21 —2,419 35,709 5·82 86	1898				•			6,09,398	76,166	16,768	2.75	4,267	21,035	3.45	70	72-12
1901	1899		•					6,09,434	73,396	21,453	3.22	-250	21,203	3.48	65	70.77
1902	1900	•					•	6,09,146	76,019	26,824	4.40	-999	25,825	4.31	74.	64.71
1908 6,14,715 87,040 74,950 5.68 —668 34,282 5.57 85 1904 6,14,715 86,261 89,055 6.35 —2,747 36,808 5.91 84 1905 6,13,608 88,266 38,128 6.21 —2,419 35,709 5.82 86	1901	•	•					6,09,416	75,579	23,165	8.80	1,108	24,278	3.68	77	70.52
1904	1902	•						6,09,565	82,019	31,739	5.20	550	31,189	5.12	80	61.38
1905 6,13,008 88,266 38,128 6-212,419 35,709 5-82 86	1908			•	•			6,14,715	87,049	₹4,950	5.68	668	34,282	5.22	85	59.85
	1904							6,14,715	86,261	89,055	6.35	-2,747	36,808	5.91	84	54-79
1 2000 200 200 200 200 200	1905		:			•		6,13,608	88,266	38,128	6-21	2,419	35,709	5.82	86	56.80
1906   6,14,396   90,595   37,047   6'03   -2,548   34,499   5-62   88	1906				•			6,14,396	90,595	37,047	6.03	-2,548	34,499	5-62	88	59-11

## History of railways constructed and in progress.

[For Index see page 112.]

# Number—Main hoad 88 Jub-head (4) JORHAT (STATE) RAILWAY (2' 0" gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jerhat.

#### Details of construction-

The line is 31.75 miles long, viz., main line (Berghop to Titzbar), 24.75 miles, and Mariani branch, 7 miles. Construction was sanctioned in 1883; the main line was opened in 1887 and the branch in 1885.

Permanent-way.—Excepting 2.51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30-lb. to the yard, the rest of the line, including the section from Gosaigaon to Borghop, is laid with steel rails, 18-lb. to the yard.

Ballast.-The line is unballasted.

Fencing .- The line is not fonced.

Curves.-The sharpest curve is of 480 feet radius.

Gradients .- Four miles on a gradient of 1 in 800.

## Terms of contract-

The line is owned and worked by the State.

			_					•		ŋ 	CARENT.					HAT'	LB II.
			c	alend	lar y	oar.				Capital outlay to and of each year.	Gross carn- ings.	Net carnings.	Per cent. on capital outlay.	Interest.	iain or loss to the State.	Earvings per mile per week.	Proportion of expense to carnings.
										Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
884									$\cdot$	4,38,339	1,161	-483		17,533	-18,016	40	141-60
1885						•	•	•		5,14,641	31,828	-7,455		19,395	-26,850	25	123-14
886	•			•			•	•	-	5,84,608	38,271	-13,887	•••	22,026	- 35,913	28	136-28
887				•		•	•	•		6,79,372	49,199	13,772		26,608	- 40,3:0	32	127-99
898				•	•		•	•		7,10,376	55,477	75		27,807	-27,732	88	90.86
889							•			7,33,649	59,665	-3,543		29,057	- 32,600	42	105-94
89 <b>0</b>						•	•	•	٠	7,42,351	61,907	6,162	0.85	29,448	-23,286	41	90.0
891				•		•	•	•	•	7,51,421	64,589	1,453	0.20	30,026	-28,543	47	97:70
892		•		•	•		•	•	٠	7,54,791	66,079	11,789	1.56	20,107	-18,318	48	82.16
893									•	7,99,680	69,810	14,436	1.81	32,013	-17,577	52	79.8
894		•	•	•		•	•		•	8,18,184	71,933	11,201	1.37	32,587	-21,386	52	84.4
895						•		•	•	8,28,400	84,696	18,720	2.26	32,919	-14,199	61	77.8
896		•				•			•	8,65,300	89,996	13,745	1.59	33,502	-19,817	65	84.7
897				•	•	•		•	•	9,02,416	96,186	14,124	1.57	36,102	-21,978	69	85.8
898				•	•	•	•	٠	•	9,09,415	95,958	20,135	2-21	36,179	-16,044	. 70	79.0
899			•	•	•	•	•	•	•	9,31,626	96,488	-5,916		87,228	-43,174	72	106-1
900		•		•	•	•	•	•	•	9,08,643	86,695	-15,664		86,341	-52,005	63	118-0
901		•	. •	•	•	•	•	•	•	9,01,038	83,181	-4,169		36,248	-40,417	56	105.0
902			•	•	•		•	٠	•	8,95,693	86,641	-3,655		86,237	-39,892	57	104-9
903		•	•	•		•	•	•	•	9,03,843	90,710	13,594	1.21	36,408	-22,814	59	85-0
904		•	•			•	•		•	9,03,781	74,298	-8,840		36,260	-40,100	47	105-1
905		•	•	•	•	•	•	•	•	9,08,441	78,600	2,458	0.27	36,480	-34,022	50	961
1906			•	•		. •		•		9,09,185	92,540	12,995	1.43	87,418	-24,424	59	85.2

#### APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points,	Whether surveyed or not.
Λ		and the collection of the second temporal tempor	
Abasana-Suigam branch (Bombay)	.,, /		•••••
Aden railway (Bombay)	•••••	(i) Aden and Nobat Dakim	
		Alternative	
		(ii) Aden and Sheikh Othman and D'thala.	Ditto
Agra-Bharatpur railway (United Provinces and Rajputana) (New project).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Agra and Bharatpur	Survey sanctioned
Agra-Hathras railway (United Provinces).	Do.	Agra and Hathras	Surveyed
Allahabad-Benares railway (United Provinces).	Bengal and North-West- ern railway.	Allahatad and Benares	Ditto
	•	Mirzapur Branch	Ditto
Ammayanayakkanur-Uttamapalai- yam railway (Madras).	South Indian railway	Ammayanayakkanur and Uttama- palaiyam.	Surveyed
		N. A.	L.
Amraoti-Ellichpur light railway (Central Provinces).	Great Indian Peninsula	Amraoti and Ellichpur	Surveyed
Amraoti-Sonnair railway (Central Provinces) (New project).	Ditto	Amraoti & Sonnair vid Morsi	Under survey
Arakan Coast extensions (Burma)	*****	*****	*****
Arsikere—Mangalore railway (Mysore and Madras).	Southern Mahratta railway	Arsikere and Mangalore	Surveyed
Assam-Burma connection railway (Eastern Bengal and Assam, and Burma).	Assam-Bengal railway.	(i) Chittagong-Akyah-Minhla (Aeng pass route).  Alter atives	Surveyed
		(ii) I umding-Maripur-Tam mu- Yuwo-Kyathin (Manipur route).	Do
		(iii) Makum to Mogaung (Hu- kong Valley route).	Do
		(iv) Chittagong Zadabin-Prome.	
		Prome to Zadabin	Do
		Taungup branch	Do
		Zadabin to Zibingyi	Reconnoitred
Auriya-Rura railway (United Provinces) (New project).	East Indian railway	Auriya and some point between Cawnpore and Phaphund (say Rura).	Survey sanctioned
Azamgarh-Goshainganj United Provinces;.	Bengal and North-West- ern railway.	Azamgarh and Goshainganj	Under survey
В			
Bachhwara-Rowsara branch (Bengal).	Bengal and North-West- ern railway (Tirhoot section).	Bachhwara and Rowsara	Not surveyed
Badin-Jungshahi extension (Bombay).	******		•••••
Bagalkot-Hungund branch (Bombay)	Southern-Mahratta rail- way.	Bagalkot and Hungund	Surveyed

DIX 38-A.

corrected up to 31st December 1906.

i i	ī		
Gauge.	Length.	Estimated cost.	Remarks.
	Miles,	Rs.	
			See "Deesa-Tharad railway."
2' 6"	40	•	The consideration of the question of railway construction at Aden has been deferred.
5′ 6″	33		This line has been proposed with a view to making Agra one of the termini of the Nagda-Muttra railway, which is now under construction.
3′ 38″	30		The survey has been completed but the results have not yet been received by the Railway Board.
3′ 33″	91'7	49,48,539	The chief object of this project is to place the metre gauge lines of the Doahs in direct and unbroken communication with the capital of the United Provinces.
3′3∄″	10.3	5,20,000	The line has been brought under construction since the close of the year.
3′ 3∛″	61°46	•••	This line has been proposed by the District Board of Madura who are levying a special cess for promoting railway construction in the district. It was originally intended that the line should start from Dindigul, but at the suggestion of the Agent, South Indian railway, Ammayanayakkarur has been adopted as the point of junction
2' 6"	30.64	7,92,953	with that line. The survey has been completed and the results are awaited.
5′ 6″	100	•••	
	•••		See "Prome-Taungup" and "Zadabin-Zibingyi" under "Assam- Burma connection railway."
2' 6"	135'71	85,43,784	The line is intended to afford connection between the coffee estates on and near the top of the Mysore plateau with Mangalore port. The Arsikere-Hassan section (27.81 miles) is estimated for a metre gauge substructure, owing to the probability of its eventually forming part of the Mysore-Arsikere chord.
3' 3ક્રે°	450	7,00,00,000	The results of the surveys of the first three routes were forwarded to the Secretary of State for India in 1896, when the Government of India recorded the opinion that they were unable to support the immediate construction of any of the projected lines: as there was no prospect of any of them being commercially successful, and that, while
3′ 3€″	3 <sup>8</sup> 5	6,50,00,000	the Military authorities preferred the Manipur route, the connection was of no urgency from either a political or military standpoint.  The fourth and most southerly of these routes includes branches to
3' 3 <sup>2</sup>	284	3,83,00,000	Taungup and Akyab and was proposed in 1905 by the Government of Burma, who carried out from Provincial funds the survey from Prome to Zadabin and Taungup and the reconnaissance from Zadabin to Zibingyi, and urged the carrying out from Imperial funds of a detailed survey of the Zadabin-Chittagong section, including the Alvich branch. The proposal in undergoing section, including the
3′ 38″	1092	2,48,89,800	Akyab branch. The proposal is under consideration. [See also "Buthidaung-Maungdaw railway".]
3' 33"	. 4	2,72,500	
3' 31"	170	1,87,00,000	•
Not stated, pro- bably 5' 6".	19		*
3′ 3 <b>1″</b>	59	849	. '
3' 3 <del>1</del> "	14	5,50,000	
	·		See "Lower Sind branches."
3' 31"	31	24,41,757	This line will form a feeder to the Bijapur branch of the Southern Mahratta railway.

#### APPEN

	Ţ				
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points	s.	Whether surveyed o	or not.
B – contd.					
Bahadarpur (Garda)-Songhir exten- sion (Bombay).	Bombay, Baroda and Central India railway (Gaekwar's Dabhoi).	Bahadarpur and Songhir		Surveyed	
Balamau-Sitapur railway (United Provinces).	1	Balamau and Sitapur	•••	Surveyed	•••
Bangalore (Taragupet)-Chikballa- pur light railway (Mysore).	Southern Mahratta rail-	Bangalore and Chikballapur		Surveyed	***
Bankura (or Bishenpur)-Calcutta chord railway (Bengal).	Bengal-Nagpur railway	Bishenpur vid Bhandarhati, Hooghly or Howrah or t neighbourhood.	and that	Surveyed	•••
•					
	•				
Bansdih road-Maneerghat branch (United Provinces).	Bengal and North-West-	Bansdih road and Maneerg	hat.	Under survey	•••
Baran-Marwat railway (Raj- putana).	Bombay, Baroda and Cen- tral India railway	Baran and Marwar with extensions—		Surveyed	
	(Rajputano-Malwa).	(i) ]chazpur to Nasirabad	•••	1)0	•••
Baran-Nasirabad railway (Raj-	.,	(ii) Jehazpur to Paondero	•••	Do	•••
Baroda-Savli railway (Bombay)	Bombay, Baroda and Central India railway (Gaekwar's Dabhoi),	Baroda and Savli	•••	Surveyed	•••
Barwaha-Bodeli light railway (Central India).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Barwaha to Bodeli	•••	Reconnoitred	•••
•		Alternative.		D.:	
Baura-Matabhangah-Konaghat ex-	Bengal Dooars railway	Barwaha to Nandod	•••	Ditto	
tension (Eastern Bengal and Assatu).	Dengal Dooals lanway	Baura and Konaghat	•••	See "Remarks"	
Bausi-Baidyanath railway (Bengal)	East Indian railway	(i) Bausi to Baidyanath  Alternative.		Surveyed	٠
		(ii) Bausi to Adjai	İ	<b>.</b>	
Belapur (or Lakh)-Sangamner	Great Indian Peninsula	Lakh and Sangamner	***	Do.	***
branch (Bombay).	railway.	Lakii and Sangamner	•••	Reconnoitred	
Bellarpur-Watangal railway (Cen- tral Provinces and Hyderabad, Nizam's).	%; ••• a∎•	>> 254			
Belo-Shahbunder light railway (Bombay).	****** '	******	ļ		
Berhampur-Gopalpur light railway (Madras).		*****		800000	
Berhampur-Russelkonda light rail- way (Madras).	*****	*****		*****	
		D	- 1	<b>N</b> 1	- 1
Bezwada-Jaggiapett branch (Mad-	Madras railway	Bezwada and Jaggiapett		Not surveyed	

DIX 88-A—continued.

corrected up to 31st December 1906.

	•	_	•
¢ Gauge.	Length.	Estimated cost.	Remarks.
	Miles.	Rs.	
2' 6"	(Bahadarpur to Heran river).	• 5,84,000	The line will be constructed by the Baroda Durbar in whose torritory it will entirely lie.
5' 6"	37.13	19,45,446	The Secretary of State has approved of the construction of this line as part of the Oudh and Rohilkhand railway.
2' 6"	39.99	7,19,765	No application has yet been made to the Railway Board for the construction of this line.
5' 6"	Sec "Re	marks,"	The length and estimated cost are as follows t— Miles. Rs.
			Bishenpur to Hooghly 71'44 { Double line 1,32,55,476 Single , 91,02,355 Double , 1,47,11,125 Single , 1,00,74,837
			To the above has to be added the cost of a bridge over the Hooghly and approaches (doublaline), estimated at Rs. 72,57,836 for 5'92 miles if constructed at Cossipore, or Rs. 54,46,956 for 5'19 miles, if constructed at Panihati.
3' 38"	13		The line has been proposed by the Bengal and North-Western railway as a feeder to their main line.
3' 33"	313.39	1,36, <b>6</b> 6,80 <b>6</b>	Two lines were surveyed in 1898-99, vis., Baran to Nasirabad and Baran to Marwar, the length and cost of the former being 153'29
3′ 38″	бо	Not given separ- ately.	miles and Rs. 96,11,662, respectively. The Baran-Kotah section of this line is under construction.
3' 31"	70.85	31,62,877	
			See." Baran-Marwar railway."
2' 6"	32		The results of survey have not yet been submitted.
2' 6"	163}	54,28,691	The alternative to Nandod includes a bridge over the Nerbudda, which partly accounts for the higher cost.
2' 6"	1931	72,49,284	
3' 3%	20		The survey of this line by the agency of the Bengal Dooars railway was sanctioned by the Government of India in 1900, but the results have not yet been received.
. 5′ 6″	44'43	32,35,066	
5' 6"	44'94	32,96,899	
5' 6"	32.86	•••	An alternative alignment, four miles shorter, from Belapur vid Bab- lishwar, was also examined but the estimates of cost have not been submitted.
•			See "North and South sailway."
100	•••	•••	See "Light railways in Sind."
			See " Ganjam District Light railways."
		•••	Ditto.
5' 6"	54	43,50,000	
5' 6"			This line will probably be constructed by the East Indian Railway Company.
İ.,			

APPEN

	1		7
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	* Whether surveyed or not-
B—concld.			
Bhamo-Momein (Tengyueh) railway (Burma).	Burma railways across a ferry between Bhamo and Katha.	Bhamo and Momein	Reconnoitred
Bhatni-Bettiah extension (Bengal)	Bengal and North-West- ern railway.	Bhatni and Bettiah	Partly surveyed
Bhojudih-Daltonganj railway (Bengal).	Bengal-Nagpur railway	Bhojudih and Daltonganj	Surveyed
Bilaspur-Mungeli-Mandla railway (Central Provinces).	Bengal-Nagpur railway	Bilaspur and Mandla	Under survey
Bir-Bhopal railway (Central India and Central Provinces). (New project.)	Great Indian Peninsula railway.	Bir and Bhopal	Being reconnoitred
Bishenpur (or Bankura)-Calcutta railway.		*****	
Bombay-Sind connection railway (Cutch, Sind and Bombay).	Bombay, Baroda and Cen- tral India railway.	Viramgam and Badin— (i) Northern route (ii) Cutch route	Reconnoitred Do
Bombay-Southern Mahratta railway (Bombay).	Southern Milliatta rail-	Karad Road and Hogg Island and Vingorla.	Not surveyed
Borawar (or Degana)-Hissar railway (Rajputana and Punjab),	Jodhpur-Bikaner railway	Borawar (or Degana) and Hissar	Under survey
Borjan-Suntak tramway (Eastern Bengal and Assam).	Assam-Bengal railway	Borjan and Suntak	Not surveyed
Broach-Jambusar-Masor Road railway (Bembay).	Bombay, Baroda and Central India railway.	Broach and Masor Road	Not surveyed
Burdwan-Kutwa railway (Bengal)	East Indian railway	Burdwan and Kutwa	Surveyed
Buthidaung-Maungdaw railway (Burma).	******	Buthidaung and Maungdaw	Surveyed for a 2' o" trainway.
c			
C.  CACHAR DISTRICT TRAMWAYS—  Sealtick—Lala Bazar (Eastern	ر ا	Scaltick and Lala Bazar	Reconnoitred by the pro-
Bengal and Assam). Silchar—Duarbund (Eastern Bengal and Assam). Silchar—Tikalpur (Eastern Bengal and Assam).	Assam-Bengal railway	Silchar and Duarbund Silchar and Tikalpur	moters. Ditto
Calcutta Central railway (Bengal)	East Indian railway .	Howrah and Sealdah	Not surveyed
	·		
Captainganj-Padrauna branch (United Provinces).	Bengal and North-West- ern railway.	Captainganj and Padrauna	Not surveyed
<del></del>			

DIX 38-A-continued.

## corrected up to 31st December 1906.

Gauge.		Length.	Estimated cost.	Remarks.
		34:1	Rs.	
	_	M iles.		A detailed assess has been appropriated as the inner and
2'	67	124	1,14,42,000	A detailed survey has been sanctioned and is in progress.
3'	38"	50		The survey was carried out in 1903 up to the east bank of the Gandak river, about 42 niles, and was then abandoned by the Bengal and North-Western railway.
5'	6"	171	1,68,00,000	
. 2'	6"	170		This line will shorten the distance between Nainpur, the centre of the Satpura system, and Calcutta by about 56 miles.
5'	67	110		This line has been proposed as an alternative to the doubling of the section from Itarsi to Bhopal.
				See "Bankura (or Bishenpur)-Calculta railway."
5′ 5′	6" 6"	269 30. <b>;</b>	2,12,73,0°0 2,36,14,250	These routes were reconnoited during 1906. Both start from Viran- gam and terminate at Badin. The northern route passes through Radhappur, Sugam, Nagar Parker and Rohim-ki-Bazar, while the southern route, which traverses the territory of His Highness the Rao of Cutch, goes vid Malia, Anjar, Bhuj and Lakhpat.
3'	327	202	1.58,09,000	
3'	38"	180	33.07,790	This line has been proposed by the Jodhpur and Bikaner Durbars for construction and working as part of the Jodhpur-Bikaner railway. It will be about 200 miles in length if Degana be taken as the initial point. It will probably supersetle the Kuchaman-Sirsa chord railway.
6 miles 3'	38"	} 8		
2'	6*	31		The Baroda Durbar offered to construct the line in 1903, but have since abandoned it.
5'	6"	34	26,49,418	This line will probably be constructed by the East Indian railway as part of their undertaking when lunds are available.
3'	33"	17'25		The Arakan Company, Limited, are negotiating with the Government of Burma for the construction of this line, with the possibility of its ultimate absorption in the Prome-Zadabin-Chittagong scheme. [See "Assan-Burma railway connection".] This proposal is under consideration. The original proposal by the Company was for a 2'0" tramway (for which alone a survey has been made) at an estimated cost of Rs. 9,49,858. It has since been dropped.
				The Railway Board have approved of a survey being catried out on the 3' 33" gauge at the expense of Government.
2'	6*	24	1	
. 2'	6"	22	14.75,405	These lines were proposed in the interests of the tea industry and as
2	<b>6</b> '	14		feeders to the Assam-Bongal railway. The proposals fell through owing to the inability of the Local Administration to guarantee interest on capital at 3 per cent. per annum which the promoters had asked for.
5'	6*		£1,500,000	The scheme comprised a permanent road and railway fridge over the Hooghly at the site of the existing floating bridge, a central parsenger station at Calcutta and an elevated junction railway to unite the East Indian and Rastern Bengal State railways and the Kidderpore docks. The estimated cost represents the total capital proposed to be raised, the figure being increased to £2,750,000 if a broad avenue to afford access to the Central station from Howrah he included in the scheme. In view of the objections of the Special Committee appointed to report on the scheme, the opinions expressed by the Government of Bengal and the fact that the project did not receive the support of those most interested in its execution, the offer made in 1898 by a Syndicate to form a company to undertake the work was not accepted.
3	' 3 <b>1</b> "	18		

#### APPEN

	*	t	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial p int.	Initial and terminal points.	Whether surveyed or not.
C -concld.	to a second		
Cawnpore-Banda railway (United Provinces) (New pro- ject).	Great Indian Peninsula railway.	Cawnpore to Banda via Hamirpur and Maudha, with a branch from Maudha to Harpalpur via Rath.	
Cawnpore-Hamirpur railway (United Provinces).	East Indian railway	Cawnpore to the river Jumna opposite Hamirpur.	Not surveyed
		c	
Cawnpore-Rae Bareli-Fyzabad railway (United Provinces).	Great Indian Peninsula railway.	Cawnpore and Fyzabad	Partly surveyed
Changa Manga-Chunian-Pak- patan branch (Punjab).	North Western railway	Changa Mangaand Pakpatan	Not surveyed
Chansama-Harij railway exten- sion to Kathi (Bombay) (New project).	Bombay, Baroda and Central India railway (Gackwar's Mchsana)	Harij and Kathi	Not stated
Chicacole Road—Calingapatam light railway (Madras). Chicacole Road-Gunipur light rail- way (Madras). Chicacole Road—Parvatipur light railway (Madras).	}		
Chhor-Tatta railway (Bombay)	•••		•••
Chupra-Mashrak railway (Bengal)	Bengal and North- Western railway.	Chupra and Mashrak	Under survey
Cuddalore-Vriddhachalam railway (Madras).	South Indian railway	Cuddalore and Vriddhachalam	Surveyed
D.			
Daeca-Aircha extension (Eastern Bengal and Assam).		•••	•••
Dacca-Mymensingh railway exten- sions (Eastern Bengal and Assam)	Dacca section, Eastern Bengal State railway.	(i) Dacca to Aircha Alternative.	Surveyed
		Tangi, vid Dassora, to Aircha.	Do
		(ii) Mymensingh, vid Netrokona to Bara Ari, with a branch from Shambhuganj to Gauripur.	Do
		(iii) Singhjani, vid Sherpur, to	Do. •
		Nalitabari.	Do
Dulle Dadaya raila ay (Pyrans)	Rusma esilmana	(iv) Netrokona to Langar Bazar	Do Reconnoitred
Dalla-Dedaye railway (Burma)	Burma railways	Dalla to a point opposite Dedaye  With a branch to Twante	n <sub>o</sub>
Damoh-Atarra light railway (Cen-	Great Indian Peninsula	Damoh and Atarra	Do
tral Provinces and Central India).  Darbhanga-Khagaria chord (Ben-	railway. Bengal and North-West-	Darbhanga and Khagaria	Under survey
gal).	ern railway. (Tirhoot section.)		
Darrang District tramway (Eastern Bengal and Assam).		•••••	****
		1	L

DIX 38-A—continued.

corrected up to 31st December 1906.

		-	*
Gauge.	Length.	Estimated cost.	Remarks.
			•
	Miles.	Rs.	
5' 6"	147		This will include the Campore-Hamirpur railway project.
<b>101</b>	353		The line is assumed to cost Rs. 15.000 per mile on the 2' 6" gauge.  Proposals were received in 1904 for its construction as a steam tramway on the 2' gauge. The District Board of Cawnpore agreed to guarantee interest on working capital at 4 per cent. on condition of receiving a moiety of surplus profits. In 1905 the promoters intimated that they did not desire to proceed with the scheme. The Cawnpore-Banda railway will include this line.
5' 6"	140	1,12,00,000	This line was proposed by the late Indian Midland Railway Company in 1899. The Cawnpore-Rae Bareli section, 58 miles, has been surveyed by the Oudh and Rohilkund railway, and the results are awaited.
5' 6"	70	56,00,000	This branch was selected by the Committee, appointed by the Punjab Government in 1896 to report upon railway feeders, as the most suitable out of many projects put forward for serving the rich irrigated tract of the right bank of the Sutlej. The major portion of this line will be merged in the Patti-Lodhran railway, which is at present under survey.
3' 3}"	7 <del>1</del>		This line will probably be constructed by the Baroda Durbar in whose territory it will entirely lie,
		•	See under "Ganjam District light railways."
***	***	•••	See under "Light railways in Sind."
3' 33"	21		
3′ 38″	34	•••	The results of survey have not yet been received by the Railway Board.
***			See under "Dacca-Mymensingh railway extensions." .
3' 3}"	45	76,71,060	
3′ 38″	45	75,72,105	
3' 33"	36'5	27,26,812	Includes the cost of a bridge over the Brahmaputra. If a ferry, instead of a bridge, be provided, the cost would be Rs. 20,92,797. Proposals were received in 1004, from a Syndicate, for the construction of the Mymensingh-Netrokona railway on the metre gauge and of the Singhiani-Sherpur-Nalitabari line on the 2'6" gauge. The promoters were informed in the same year of the terms on which a concession could be granted.
3′ 3¾″	25	12,38,886	For a well equipped line, with ferry. For a cheap line with, and without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,250,
3' 3 <del>1</del> "	50.2	•••	respectively. The results of survey are awaited.
3 3%	342	16,85,814	The line was proposed to serve the delta of Lower Burma. It would have to contend against keen river competition and, therefore,
3′ 3₹″	141	7,11,472	its prospects are not promising.
a' 6°	151	27,18,000	This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.
3' 3 <b>1"</b>	59	***	
<b></b>	•••		See " Mangaldai tramway."
			,

Name of project, and, in brackets the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
Dconcld.			
Deesa-Tharad railway (Bombay)	Bombay, Baroda and Central India railway (Palarpur-Deesa).	Deesa to Tharad with branches— (i) Diodar to Radhanpur.	Surveyed
		(ii) Abasana to Suigam	Do
Degana (or Borawar)-Hissar rail way (Rajputana and Punjab).		•••••	<b></b> .
Dehra-Mussooree-Landour railwa (United Provinces).	railway.	Dehra to Mussooree	Surveyed
	(Hardwar-Dehra,)	Mussooree to Landour	Not surveyed
Dehra Ghazi Khan-Sakhi Sarwa branch (Punjab).	North Western railway	Dehra Ghazi Khan and Sakhi Sarwar.	Do
Dhak kranch (Punjab) (New pro ject).	- Ditto,	Dhak to the foot of the hills near Katha.	Under survey
Dharmapuri-Bangalore (Madras and Mysore).	Madras raffway	Dharmapuri við Palakodu to Bangalore with a branch from Palakodu to Krishnagiri.	Surveyed
Dholka-Dhandhuka-Ranpur extension (Bombay).	Bombay, Baroda and Central Irdia railway (Ahmedabad-Dholka).	Dholka to Dhandhuka vid Fedra Alternative.	Do
•	(11	Dholka to Dhanduka viá Gamph	Do
		Chaudhuka to Ranpur	Reconnected
Dhulia-Amalnet branch (Hombay)	Great Indian Peninsula		Surveyed
Dindigul-Palghet railway (Madra		Dindigul to Palni	Do
•		Palni to Palghat vid Pollachi and Kollengode.	Do
Dindigul-Uttamapalaiyam railwa (Madras).	y		*****
Diodar-Radhanpur branch (Bon bay).		••••	******
Dodbele-Kolar gold-fields railwa (Mysore) (New project).	Southern Mahratta railway (Mysore section).	l odbele to the Kolar gold-fields	Not surveyed
Dudhwa branch extension t Ramnagar ghat (United Provinces).	1 11	Sonaripur and Ramnagar ghat	Surveyed
Dusi-Salur light railway (Madra: F	Dengal-Nagpur railway	Dusi to Salur vid Bobbili with a branch from Paddapenki to Parvatipur.	Not surveyed
Fatehpur-Markundi chord (United Provinces).	Enst Indian railway	Fatchpur to Markundi	Surveyed
	13	(r) Fatehpur to Karwi	Do.
C		(is) Khaga to Manikpur	
G. Gadag-Yalvigi railway (Bombay		Gadag to Yalvigi with gold mine	Surveyed
	way.	(a) Carlanda Kabulawathatti	Do.
	,	(1) Gadag to Nabulayatkaiti	D6.
	1.	(a) Nabapur on (t) to Sangli	Do
		(2) Nabapur on (1) to Sangli	Do
Gairouls-Chandpur railway (Unit	ed Oudh and Rohilkund	(3) Beldahadi on (1) to Hosur	

DIX 38-A.—continued.

corrected up to 31st December 1906.

		-γ		•
	Gauge.	Length.	Estimated cost.	R BMARKS.
		Miles	D.	
	3' 31"	Miles. 84:84	Rs - 22,71.957	This line will be an extension of the second
	3 4.	1 04 04	22,/1.95/	This line will be an extension of the existing Palanpur-Deesa railway.
	3' 38"	16		The results of survey have not yet been received.
	•••	""		See "Borawar (or Degana)-Hissar railway."
	a' o"	27	32,895	An alternative to the Dehra-Mussoorce project would be to extend the Hardwar-Dehra railway on the 5' 6' gauge to Raipur or some place at the foot of the hills and to connect Mussoorce by a rope incline.
	5′ 6″	35	35,00,000	at the loct of the lims and to connect Mussooree by a rope incline.
	5′ 6″	10	•••	This line has been proposed chiefly in the interests of coal trade.
	2' 6"	92		The surveys have been completed and the results of survey are awaited.
	3′ 3∛″	38.64	,	The surveys have been completed and the results are awaited.
	3' 33"	41.20		
	3′ 3₹	16}	4,62,000	
	5' 6°	20	20,00,000	
c	3' 38"	35.51	33,52,000	
٤	5' 6"	35,51	44,47,000	The South Indian railway has been authorized to prepare an estimate
	5' 6"	77*68	99,02,257	for this line on the 3' 32" gauge.
	•••			See "Remarks" against "Ammayanayakkanur-Uttamapalaiyam railway."
	•••		•••	See "Deesa-Tharad railway," of which this line is proposed to form a
	3' 3%"	80	•••	This line has been urged by the Mysore Durbar in consideration of its administrative advantages and as likely to develop a rich and populous part of the State. The Government of India have approved of a reconnaissance being carried out at the cost of the Mysore Durbar to ascertain its financial prospects.
	3′ 31°	<b>20'7</b> 9	4,58,891	This line is intended primarily to serve the Government forests.
	2' 6"	65		This line, which is situated in the Vizagapatam district, was proposed by an English Syndicate who put forward proposals for the construction of certain light railways on the 2'6" gauge in the Ganjam District.
	5′ 6″	72.2	98,46,166	- San and Ganjam District.
	5′ 6″	520	72,59,200	
	5′ 6″	56.7	85,98,362	
	3' 31"	20158		This line is bounded as form
	3 31 31	33 58 13 65	•••	This line is intended to form a chord between the main line and the Harihar branch of the Southern Mahratta railway. Part of it will also
	3 31 31 3	5'39	•••	supply a branch to the Dharwar goldfields. The surveys have been completed and the results are awaited.
	3' 31"	2.87	•••	•
	5′ 6°	22.12	5,05,953	
1				

#### APPEN

	·		
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
G-concld.			
Ganges bridge:— at Godag,.ri (Eastern Bengal and Assam). or	Eastern Bengal State railway, Katihar Axtension.	Lalgola and Godagari	Surveyed
at Sara (Eastern Bengal and Assam).	Eastern Bengal State railway, Northern sec- tion.	Damukdia and Sara	Do
Ganjam District light railways (Madras).			
The lines comprised in this scheme are:—		•	
(i) Berhampur-Gopalpur (Madras).	Bengal-Nagpur railway	Berhampore and Gopalpur	Not surveyed
(ii) Berhampur-Russelkorda	Ditto.	Berhampur and Russelkonda	Surveyed
(Madras). (iii) Chicacole road-Calingapa-	Ditto.	Chicacole road and Calingapatam	Not surveyed
tam (Madras). (iv) Chicacole road-Gunipur	Ditto.	Chicacole road and Gunipur	Not surveyed
(Madras). (v) Chicacole road-Parvatipur	Ditto.	Chicacole road and Parvatipur	Not surveyed
(Madras). (vi) Parlakimedi-Baruva	Ditto.	Parlakimedi and Baruva	Not surveyed
(Madras).			
Garda (Bahadarpur)-Songhir ex- tension (Bombay).		·· •••	******
iheria extension (Bengal)	Eastern Bengal State railway.	Lalgola and a point on the mouth of the Bhagirathi river near Gheria.	
Goaltindo-Narayangunj extension (Eastern Bengal and Assam).	Eastern Bengal State railway.	Lakhee Khal Hat (opposite Farid- pur) and Munshiganj.	Do
Godagari bridge (Eastern Bengal and Assam).	141.400	••••	•••••
Gogra bridge at Chand-deara Ghat (United Provinces).	Bengal and North-West- ern railway.	Chand-deara Ghat and Manjhee Ghat.	Surveyed
Guntur-Repalli branch (Madras)	Southern Mahratta railway.	Guntur and Repalli	Surveyed
Gurumaishini-Sini railway (Bengal) H.	Bengal-Nagpur railway	Gurumaishini and Sini	Do
Hajiganj-Shatnal branch (Eastern Bengal and Assam).	Assam-Bengal railway .	Hajiganj and Shatnal	Surveyed
Hansi-Jakhal railway (Punjab) .	Bombay, Baroda and Cen- tral India railway (Rajputana-Malwa).	Hansi and Jakhal	Surveyed
Harda-Hindia railway (Central	Grent Indian Peninsula	Harda and Hindia	Not surveyed
Hardoi-Sandi branch (United Provinces).	Oudh and Rohilkhand railway.	Hardoi and Sandi	Surveyed
Harpalpur-Kalpi light railway (United Provinces).	Great Indian Peninsula railway.	Harpalpur and Kalpi	Partly surveyed
	1	1	A company of the comp

# DIX 38-A.—continued.

Gauge.	Length.	Estimated cost.	* Remarks-
	Miles.	Rs.	
Undecided (pro- bably mixed 5' 6" and 3' 3\(\frac{3}{2}\)		1,10,00,000	The Committee appointed by the Government of India to investigate and report on the bridging of the Ganges have, since the close of the year, submitted their report, which is under the consideration of the Government.
Ditto	•••	1,30,00,000	
		•	
2' 6"	8	2,00,000	These lines were put forward by an English syndicate who proposed to take over from the Raja of Parlakimedi the 2' 6" gauge railway between that place and Naupada.
2' 6"	49.08	14,90,711	between that place and traupada.
2' 5"	24	6,00,000	
2' 6"	65	17,85,000	_
2' 6"	42	10,50,000	
2' 6"	35	8,75,000	
•,,			See "Bahadarpur (Ga. da)-Songhir extension".
5′ 6*	13'47	9,18,960	The object of the scheme is to provide a ghat station, which can be relied on in the high-water season, on the right bank of the Gange for the Godagari-Lalgola ferry. It has been decided to await the results of working at Lalgola ghat before undertaking the construction of the line.
3′ 38*	40	58,46,738	The project provides for an ordinary transhipment ferry between Lakhee Khal Hat and Faridpur, and a wagon and passenger ferry at Munshiganj.
	***		See "Ganges bridge".
3′ 3 🕽 ″		See "Remarks."	The cost of bridge and approaches is Rs. 31.15.511, but including the cost of taising capital and the interest on capital during construction it amounts to Rs. 35.51,682. The project is under revision in accordance with the instructions sent out by the Board of Directors in England.
3′31″	38	17,33,687	The District Board of Guntur are desirous of constructing this line. The Government of Madras have been asked to report whether ther is any prospect of the District Board being able to raise the necessary capital without State assistance.
5′ 6*	44	32,27,438	This line has been projected in connection with Messrs. Tata & Sons scheme for iron and steel works near Sini.
3, 3 <b>3,</b>	24.39	32,81,500	This project is for the establishment of a connection between the Assam Bengal and the Eastern Bengal State railways by means of a wago ferry between Shatnal and Narayanganj on the Goalunde Narayanganj extension of the latter line.
3' 3 <b>i</b> "	50°57	20,45,764	This line would connect the Southern Punjab railway at Jakhal with the Rajputana-Malwa railway at Hansi. It may, however, he superseded by the proposed extension of the Patiala-Jakhal railway views to Narnaul.
	<b>00</b> 1111		This railway was recommended as a feeder line by the Great India Peninsula railway.
5′ 6°	14:39	3,62,004	
2' 6"	102	15,90,924	Only the Harpalpur-Rath section (25.83 miles) was surveyed by the late Indian Midland railway for a 2'0" gauge line, from the result of which the present estimates have been prepared.  This line will probably be superseded by the Cawnpore-Hamirpu Banda railway with a branch from Maudha vid Rath to Harpalpu for which the Government of the United Provinces has expressed a preference.

## APPEN

		•	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
H - concld.	4 347 a 900 - 100000000000000000000000000000000		
Harpalpur-Nowgong light ra'lway (United Provinces and Central India).	Great Indian Peninsula Railway.	Harpalpur and Nowgong	Surveyed
Henzada-Pantanaw railway (Burma) (New project).	Burma railways	Henzada and Pantanaw	Reconnoitred
Hsipaw-Mong Nai extension (Burma).	Ditto	Hsipaw to Manpan	Surveyed
Hyderabad-Kistna river railway (Hyderabad, Nizam's).	Nizam's Guaranteed State railway.	Manpan to Mong Nai  Hyderabad and Kistna river	Not surveyed Surveyed 50.
• Hyderabad (or Kotrí)-Karachi railway (Bombay).	•		***
r.			
IDAR ROAD.—Brahma Khed extension (Bombay).	Bombay, Baroda and Central India railway (Ahmedabad-Parantij).	Idar Road and Brahma Khed	Surveyed
ITARSI.—Ellichpur railway (Central Provinces).	Great Indian Peninsula railway.	Itarsi and Ellichpur	Not surveyed
ITARSI.—Nagpur railway (Central Provinces).		··· <b>···</b>	******
TARSI.—Wardha railway (Central Provinces).		<b></b>	*****
J.			
Jalesar Road—Kasganj tramway (United Provinces).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Jalesar Road and Kasganj .	Not surveyed
•			
Jammu-Srinagar railway (Kashmir).	North Western railway.	Jammu and Srinagar. The alternative routes are:	
		(i) Larulari-Banihal route	Surveyed .
		(ii) Chenab Valley-Banihal route.	Do
		(iii) Golabgarh route .	Do
Jamnagar-Salaya extension (Kathiawar, Bombay).	Bhavnagar-Gondal-Juna- gad-Porbandar railway (Rajkot-Jamnagar),	Jamnagar and Salaya	Not surveyed
Jehnzpur Nasirabad extension		•••••	
(Rajputana). Jehazpur-Paondero extension (Rajputana).	. ***	<b></b>	******
Jhang-Sangla railway (Punjab) .	North Western railway .	Jhang and Sangla	Surveyed
Jullundur Doab group lines (Pun- jab) (New project).	North Western railway.	Hoshiarpur and Nawa Shahr .	Under survey
•	4.		

	Gauge.	Length.	Estimated cost.	REMARKS.
		Miles.	Rs.	
	21 69	10.33	2,71,762 •	This line was surveyed by the late Indian Midland railway on the alor gauge, on the results of which the present estimates are based.
	3' 3 <b>†</b> "	53	32,58,228	A detailed survey of this line has been sanctioned since the close of the year.
	3'31"	<b>5</b> 0	35,61,178	The Government of Burma consider the Southern Shan States railway to be more urgent than this line.
	•••		•	
	3'31"	See "Remarks"	See "Remarks"	This line has been surveyed by the Nizam's Government, but the results have not yet been received by the Railway Board.  It will be about 148 miles in length and will cost Rs. 1,23,68,000 roughly. In conjunction with the Kurnool-Dhone line it will form the southern portion of the through metre gauge connection between Northern and Southern India.
	•••	•••		See "Light railways in Sind."
	3′ 31″	33'91	844	The proposals for the construction of this line by the Ahmedabad-Parantij Railway Company are under consideration. The surveys have been completed and the results are awaited.
	***	*** 、		This railway was recommended as a feeder line by the Great Indian Peninsula railway. It will be partly superseded by the projected Itarsi-Nagpur railway.
	*****		•••••	See " North and South railway ".
	******	******	4	See " North and South railway ".
	a' 6°	50	15 to 20 lakhs	The Raja of Awa has applied to the Government of the United Previnces for a concession for this line with permission to utilize the existing road and the canal and road bridges for laying the line on.
	a' 6° a' 6°	186 <u>1</u> 173	2,38,61,500 2,54,57,500	The connection with Srinagar vid Sarai Kala and Abbottabad which it more feasible has been decided upon, vide "Sarai Kala-Abbottabad Srinagar railway."
ĺ	2' 6"	156-17	3,34,73,596	
Ì	3' 3 <b>!"</b>	35	*****	This project would probably be undertaken at the expense of the Jam nagar Durbar.
	*** 600	44444	*****	See "Baran-Marwar railway."
ď		244509	******	J. A.
	5' 6'	74-40	36,98,588	This line will be constructed by the State as an integral part of the North Western railway. Complete report is awaited.
	s' 6"	t22 <b>}</b>	•••••	The projected railway starts at Hoshiarpur and passes through Adampur, Juliundur, Kapurthala, Sultanpur, Malsian, Nakodar, Nus Mahal, Rur Kha and Phagwara to Nawa Shahr with branches from Nawa Shahr to Garhshankar on the north and Rahon on the south. The following sections of the line were previously surveyed and estimated for:
		(1) A Market (1)		Miles. Gauge, Cost.

Name of project, and, in brackets, the province in which it is . situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points,	Whether surveyed or not.
Jconcld.			
Jullandur-Hoshiarpur railway (Punjab).	,	·····	·····
Jullundur-Kapurthala-Sultanour railway (Punjab).			
K.		İ	
Kalnura-Chhatak tramway (Eastern Bengal and Assam).	•••••		
Kalikiri Rayachoti branch (Madras).	South Indian railway .	Kolikiri or Piler and Rayachoti .	Surveyed
Knimptee-Deolapar railway (Central Provinces).	Bengal-Nagpur railway .	Kamptee to Deolapar with a branch from Munsar to Ramtek.	Not surveyed
Kangra Valley radway (Punjab) .	North Western railway.	Path inkot to Palampur with a branch from Aund to Durera.	Reconnoitred
Karauli branch (Rajputana) .		Gungapur and Karauli	Not surveyed
Karimganj-Chanli Khira tramway (Eastern Bengal and Assam).	141111	*****	******
Karnal-Kaithal-Nabha branch (Punjab).	East Indian railway (Delhi-Umballa-Kalka).	Earnal and Nabha	Not surveyed
Karwi-Rajapur railway (United 1 rovinces).	Great Indian Peninsula railway.	Karwi to Rajapur direct	Under survey
		Karwi to Rajapur vid Pahari.	Ditto.
Kathgodam-Naini Tal branch (United Provinces).	Rolulkund and Kumaon railway.	Kathgodam and Naim Tal	Not surveyed
Khamgaon-Jalna railway (Central Provinces and Hyderabad, Nizam's).	Great Indian Peninsula railway.	Khamgaon and Jalna	Surveyed
Khandwa-Akola-Nanded railway (Central Provinces and Hyder- abad, Nizam's).	Bombay, Buroda and Central India ruilway (Kajputan i-Malwa)	Khardwa and Nanded	Surveyed
Khanpur-Chachran railway (Pun- jab).	North Western railway	Khanpur and Chachran	Surveyed
Khijadia Amreli railway (Kathia- war, Bombay).	Bhavnagar-Gondal-Juna- gad-Porbandar rail- way.	Khijadia and Amreli	Partly surveyed
Kıssengunge-Jalpaiguri rilway (Eastern Bengal and Assam).	Eastern Bengal State	Kissengurge and Jalpaiguri	Surveyed
Kosamba-Velachha— Zankavao- Vajipur branch (Bombay).	Bombay, Baroda and Central India railway,	Kosamba and Vajipur	Do,
Kotri (or Hyderabad)-Karachi light railway (Bombay).	******	******	P89++=
Krishnagar-Jalanghi railway (Bengal).	Eastern Bengal State railway.	Krishnagar and Jalanghi	Surveyed
Kuchaman-Sirsa chord (Rajputana and Punjab).	Bombay, Baroda and Central India railway (Rajputana-Malwa),	Kuchaman and Sirsa	Not surveyed

DIX 38-A—continued.

Gauge.	Length.	Estimated cost.	Remarks.
		•	
	Miles.	Rs.	*
	.,,	•	See " Jullundur Donb group lines."
•••••	******	••••	See Junumum 170/10 g. out printes.
	•••••	<b>us</b>	See "Sylhet District tramways."
3' 3%"	34'42	10,75,736	
2' OT 2' 6"	34.2	······	This line is designed to carry the produce of the manganese mines in the Ramtek area.  The Kamptee-Kamtek railway, which has been sanctioned for construction, supersedes a part of this project.
2' 6"	87	57,85,440	The scheme as originally proposed contemplated a main line from Pathankot via Padampur, Baijnath, Mundi, Suket, Bilaspur, Nalagarh and Rupar to some point on the North Western railway between Ludhiana and Sirhind, with branches to Dalhousie, Dharamsala, Sultanpur, Kalka and Simla.  A concession was, however, granted to a London syndicate for the construction of the section from Pathankot to Palampur with a branch to Dunera. The concession has since lapsed.
Not stated .	25	•••••	This branch was proposed by the Karauli Durbar with a view to undertaking earthwork as a measure of famine relief. It will connect Karauli with the Nagda-Muttra railway at Gungapur.
••••••	•••••	*****	See "Sylhet District trainways."
5′ 6"	70	56,00,000	
5' 6"	18	•••	
5′ 6 <b>°</b>	21	•••	
2'	13	12,00,000	This line was proposed by private enterprise in 1895 and a concession was granted for its construction, which lapsed in 1808.
2′ 6″	93'55	32,65,151	Soli was granted to the solitation, which impoce in 1990.
3′ 3¾″	252'25	1,90,00,000	This line will form the northern portion of the through metre gauge connection between railways in Northern and Southern India.
5′ 6*	23*27		The results of survey have not yet been received by the Railway Board. The line will connect with Mithankot by means of a steam ferry be- tween that place and Chachran.
*3' 3 <b>}*</b> *	Io½		This line was proposed by the Baroda Durbar with a view to undertaking earthwork as a measure of famine relief. The Machiala-Amreli Section, about 6 miles, has been surveyed by the Durbar. The Durbar has since proposed its extension vid Chalala and Khamba to Velan Bunder.
3',3%*	63 <sup>-67</sup>		The results of survey have not yet been received by the Railway Board.  The line will afford an alternative route, vid the Ranaghat-Katihar railway for traffic between Calcutta and Darjeeling.
2' 6"	63:55	******	The line was surveyed by the Bombay, Baroda and Central India railway in 1900, but no detailed project has yet been submitted.
es	*****		See "Light railways in Sind."
2' 6"	56·10	14,00,000	The detailed project and estimates for this line have been received, but are held in abeyance pending proposals from the Government of Bengal.
3 3 7	170	58,31,000	This line will probably be superseded by the Borawar-Hissar railway projected by the Jodhpur and Bikaner Durbars.

#### APPEN

the scheme are : (1) Badin-Jungshahi	North Western railway	Badin and Jungshahl	Surveyed
Lower Sind branches (Bombay)— The lines at present comprised in		•	
or Tatta-Karachi	*****	Tatta to Karachi	Not surveyed
(8) Hyderabad (or Kotri)- Karachi.	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Hyderabad (or Kotri) via Tatta to Karachi.	Not surveyed
(7) Belo-Shahbunder	,	Belo on (5) to Shahbunder	Not surveyed
• (6) Mirpur Buttora-Dhindee		Mirpur Buttora on (5) to Dhindee	Not surveyed
(5) Chhor-Tatta	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Chhor and Tatta	Not surveyed
(4) Shadipalli-Samara with a possible extension thereof to meet (5).	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Shadipalli vid Samara to a point on (5).	Not surveyed
(3) Shadipalli-Mehoo Suboo	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Shadipalli and Mehoo Suboo	Not surveyed
(2) Mirpur Khas-Sangur	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Mirpur Khas and Sangur	Not surveyed
scheme are:—  (1) Mirpur Khas-Jhudo	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Mirpur Khas and Jhudo	Not surveyed
The lines comprised in the			
Light railways in Sind (Bombay)-		(-) confined (anticolor)	Reconnoitred
		(1) Hsenwi (Theinni) (2) Hsupkyet (Supkyet)	Possensituad
		( )	Reconnoitred
Lashio·Kunlong extension (Burma)	Burma railways	Lashio to the Kunlong ferry.  The alternative routes are:	
Larkhana-Kambar-Shahdadpur railway (Bombay).	North Western railway	Larkhana and Shahdadpur	Surveyed
Lalgola-Gheria extension (Bengal)		•••••	******
Lakh (or Belapur)-Sangamner branch (Bombay).	******	•••••	******
L.	-		
Kutwa-Ahmadpur railway (Bengal)	e e e e e e e e e e e e e e e e e e e	Kutwa and Ahmadpur	Surveyed
2,	Great Indian Peninsula railway.	Kurla and Trombay	Surveyed
Kunch-Madhogarh railway (United Provinces).	railway. (Indian Midland).	Kunch vid Jalaon to a point on the Jumna opposite Auriya with a branch from Jalaon to Madhogarh.	
	,		
Kumbakonam-Mannargudi branch (Madras).	South Indian railway	Kumbakonam and Mannargudi	Surveyed
K-concld.			
situated.	initial point.		The second of the
	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or no

DIX 38-A-continued.

1			
Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
3' 3}*	22'57	•••	The results of survey have not yet been received by the Railway Board. The Government of Madras consider this line to be more important than the Nidamangalam-Vedaraniem railway proposed by the District Board of Tanjore. The South Indian railway are, however, opposed to its construction except as an integral part of their undertaking on the ground of its being competitive.  Proposals for financing the line are awaited from the Government of Madras.
5' 6"	52	•	A certain amount of earthwork has been carried out by the United Provinces Government as a measure of famine relief. The survey has been completed, but the results have not yet been received.
5' 67	5°4 <b>5</b>		The survey has been completed and the results are awaited.
5' 6"	314	28,22,765	The line will probably be constructed by the East Indian railway as part of their undertaking, and the point of junction with the loop line will probably be at Sainthia instead of at Ahmadpur.
		*****	See "Belapur (or Lakh)—Sangamner branch."
	*****		See "Gheria extension."
2' 6"	33.3	11,68,118	On the 5' 6" gauge the cost is estimated at Rs. 19,31,676 and for a light line Rs. 13,07,000.
3' 37"	90	1,01,41,298	The Theinni route is considered in every way inferior to the Supkye route.
3′ 3³*	931	1,03,54,840	Toute.
3' 3 <del>1</del> '"	46	4,44,44	A Karachi firm has applied for permission to form a company i England with a capital of £250,000 for financing these lines. It is
	0+1200	•••••	proposed to take the Mirpur Khas-Jaudo line in hald at first an to raise £55,000 for its construction. The concessions asked for at a rebate from the traffic interchanged with the Jodhpur-Bikaner rai way, which will construct and work the line, towards a dividend
*****	*****		34 per cent, and others usually granted to Branch line companies. The application is under consideration.
*****	**1 ***		
.,,,,,,	<b>4</b> 01000	•••••	
****	*****	•••••	
*****	*****	*****	
6 649.00B	*****	•••••	
* *****	*****	•••	
•		· .	*
5' 6"	70	37:41,833	These lines, as well as the Hyderabad-Badin branch, which is now open were projected as light feeders to the North Western railway in the country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Branch Country lainer between the Indian size and the Ind
5′ 6″	33	17,19,269	country lying between the Indus river and the Runn of Cutch. The Chhor-Tatta and the Mirpur Buttora-Dhindee lines proposed under the Sind Light railways scheme partially cover the alignment of these branches.

		C	
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
М.			
Mandra-Basal railway (Punjab)	North Western failway :	Mandra to Basal rid Chakwal, Bhon and Pindi Gheb.	Not surveyed
Mangaldai tramway (Eastern Bengal and Assam).	••••••	Rangamatighat to Ghagrapara	Reconnoitred by the pro-
Margao-Kurwar railway (Bombay and Portuguese territory,)	Southern Mahratta rail- way. (West of India Portu- guese.)	Margao to Sadasivgarh ferry, opposite Karwar.	Reconnoitred
Mauli-Nathdwara branch (Raj- patana).	Udaipur-Chitor railway	Mauli and Nathdwara	Surveyed
Miraj-Bijapur branch (Bombay) .	Southern Mahratta rail- way.	Miraj and Bijapur	Not surveyed
Mirpur Buttora-Dhindee light railway (Bombay).			
Mirpur Khas-Jhudo light railway (Bombay).	}	*****	
Mirpur Khas-Sangur light railway (Bombay).	)		
Mirzapur-Maihar Chord (United Provinces and Central India).	East Indian railway .	Mirzapur and Maihar	Reconnoitred
Miyagam-Sinor branch (Bombay)	Bombay, Baroda and Cen- tral India railway.	Miyagam and Sinor	Surveyed
Moulmein-Myawaddy railway (Burma).	Burma railways	Moulmein and Myawaddy	Reconnaissance sanctioned
Moulmein-Ye railway (Burma) .	Ditto	Moulmein and Ye	Surveyed
Munsar-Ramtek branch (Central Provinces).	******	••••	*****
Murshidabad-Azimganj link (Bengal).	Eastern Bengal State	Murshidabad and Azimganj .	Surveyed
Murtajapur Pisgaon railway (Central Provinces).	Great Indian Peninsula railway.	Murtajapur and Pisgaon	Surveyed
Muttra-Aligarh railway (United Provinces).	tral India railway.	Muttra and Aligarh The alternative projects are:—	
	(Rajputana-Malwa).	(1) Muttra vid Brindaban with a new bridge near that place over the Jumna and thence direct to Aligarh.	
•		(2) Muttra avoiding Brindaban and utilising the existing bridge over the Jumna at Muttra and thence direct to Aligarh.	
Muttra-Hathras link (United Provinges (New project).	Bombay, Baroda and Central India railway (Rajputana Malwa).	Muttra and Hathras	See "remarks" .* .
Muzaffarpur-Mohammadpur chord (Bengal).	Bengal and North-West- ern railway. (Tirhoot section).	Muzaffarpur and Mohammadpur.	Under survey
Muzassarpur—Sitamarhi chord (Bengal).	Do.	Muzaffarpur and Sitamarhi	Do.
Myingyan-Natogyi light railway . (Burma) (New project).	Burma railways	Myingyan and Natogyì	Survey sanctioned .
			-

DIX 38-A-continued.

			1
' Gange,	Length.	Estimated cost.	Remarks,
	Miles.	Rs.	6
2' 6"	100		This line has been recommended for construction by the Government of the Punjab to open up the country north of the Salt Range. The Railway Board have, since the close of the year, sanctioned its survey by the agency of the North Western railway.
2' 6"	35	7,00,000	This line was proposed by private enterprise, but the project fell through owing to the inability of the Local Administration to offer the guarantee asked for.
Not stated apparently.	36 <del>1</del>	28,00,000	This line has been proposed to open up communication with Karwar, which is practically cut off from all intercourse with the outer world during the south-west monsoon when the coasting steamers cease running. About 30 miles of the line will be situated in Portuguese territory and the remainder in British territory.
3' 3#"	14.75	4,72,698	This line will be constructed by the Mewar Durbar who proposed it.
••••	77		The Barsi Light Railway Company contemplate the construction of this line as an extension of their 2' 6' gauge railway.
	*** 1**	,	. See under " Light railways in Sind."
5' 6"	140	£,55,00,000	This line was proposed by the East Indian railway. It is not considered to be of sufficient importance at present to require investigation.
a' 6"	20	5,76,032	The line has been proposed by the Baroda Durbar in whose territory it will entirely lie.
3′ 3∄″	80		
Do.	94.06	90,00,000	Preliminary repor: received. Detailed project and estimates are awaited.
*****	*****	•	See under " Kamptee-Deolapar railway."
5′ 6″	5'82	18,05,616	The project consists practically of a bridge over the Bhagirathi river below Azimganj and its approaches. It has since been abandoned.
2' 6"	131'42	56,03,381	The results of survey have been received since the close of the year.
	•		·
5' 6"	40.80	40,54,603	The question of agency for the construction and working of this line has not yet been decided, and no decision on this point is likely to be arrived at till the Nagda-Muttra railway has been opened and its effect on trade observed.
Do.	38.25	33,53,688	*
See "remarks."	***	***	Sanction has been accorded to the preparation of plans and estimates for this line on the 5' 6' gauge.
3′ 3 <del>1</del> ″	31		
Do.	34	***	
Not stated.	19	<b></b>	
i n e p mee	- iste or surremental	or ham whom radiable may a distanticity	10 m

### APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
M—concld.  Mymensingh-Netrokona exten-	,		N.
sion (Eastern Bengal and Assam.)	******	•	***
Mysore Tellicherry railway (Mysore and Madras).	Southern Mahratta rail- way (Mysore section).	Mysore and Tellicherry	Surveyed.
N.			
Nadiad-Kapadvanj brachh (Bombay).	Bombay, Baroda and Central India railway.	Nadiad and Kapadvanj	Not surveyed
Nagpur-Barosa branch (Central Provinces).	Bengal-Nagpur railway	Nagpur and Barosa	See remarks
Nagpur-Chhindwara railway (Central Provinces).	Do	Nagpur and Chhindwara	Not surveyed
Nanjangud-Erode railway (Mysore and Madras).	Southern Mahratta railway (Mysore section),	Nanjangud and Erode	Surveyed
Nar-Nadiad loop (Bombay)	Bombay, Baroda and Central India railway (Petlad-Cambay).	Nar and Nadiad	Surveyed
Nattore-Rampur Boalia branch (Eastern Bengal and Assam).	Eastern Bengal State	Nattore and Rampur Boalia	Surveyed
Nawadah-Madhupur (or Baidya- nath)-Nalhati (Bengal).	East Indian railway	Nawadah and Nalhati	Not surveyed
Nerbudda Valley light railway (Central India).	******	*****	
Netrokona-Langar Bazar extension (Eastern Bengal and Assam).	•••••	******	••• ans
Nidamangalam-Vedaraniem rail- way (Madras).	South Indian railway	Nidamangalam and Vedaraniem	Partly surveyed
NORTH AND SOUTH RAILWAY (CENTRAL PROVINCES, NIZAM'S HYDERABAD AND MADRAS.)			
The lines connected with the north- ern portion of the scheme are:			
(i) Itarsi-Wardha (Central Pro- vinces).	Great Indian Peninsula	Itarsi and Wardha	Surveyed
(ii) Itarsi-Nagpur:-			·
Eastern alignment—Itarsi, passing near Chhindwara town and the Pench Valley colliery, to Nagpur (Central Provinces).	Ditto	Itarsi and Nagpur	Ditto ,,,
Western alignment—Itarsi, vid Pandharna and Multai to Nagpur (Central Pro- vinces).	Ditto	Ditto	Ditto

DIX 38-A-contd.

<del></del>			
Gauge.	Length.	Estimated cost.	Remarks.
	Miles.	Rs.	
***	***	•	See under "Dacca-Mymensingh railway extensions".
2' 6"	144'69	81,00,000	The principal objects of this line are to open up parts of the Mysore plateau and the Malabar district and to give the coffee and other products of Coorg access to Mysore and to the scaport of Tellicherry.
5′ 6*	28	8,73,360	The District Board of Kaira have under consideration the question
2' 6"	47'04	20.04.445	of financing this line.
2 0	47'04	<b>23,34,14</b> 5	The detailed project is based on the surveys carried out by the Great Indian Peninsula railway on 5' 6' gauge in connection with the Nagpur-Itarsi line. This project covers part of the proposed Nagpur-Chhindwara railway.
a' 6"	80		The early construction of this line was urged by the Hon'ble the Chief Commissioner, Central Provinces, in order to develope trade in manganese ore and to enable Nagpur to obtain cheap coal for its mills, etc., from the Pench Valley deposits.
3′ 3∛″	120 <b>·7</b> 0	1,23,03,700	This line will link up the Southern Mahratta and the South Indian railway systems. A length of 33.70 miles, which lies in Mysore territory and is estimated to cost Rs. 20,81,764, has been sanctioned for construction by, and at the cost of, the Mysore State, but the Durbardo not propose to construct this section until the British section is put in hand.
5′ 6″	20*25	11,56,713	This line was proposed by the Baroda Durbar in whose territory it will mostly lie. The Durbar has since expressed a desire to construct it on the 2'6' gauge instead of on the 5'6' gauge and had the Nar-Piej section, 17 miles, surveyed on the 2'6' gauge by the agency of the Bombay, Baroda and Central India railway.
3′ 38″	24.43	11,14,875	This line has been deferred pending the investigation of the crossing a of the Ganges at some point between Sara and Godagari.
*	•••		This line will probably be constructed by the East Indian railway.
***	•••		See "Barwaha-Bodeli light railway."
*****	*****		See under "Dacca-Mymensingh railway extensions."
3′ 3≹″	***	•••	This line comprises the Nidamangalam—Mannargudi section of the Kumbakonam-Mannargudi line. It has been proposed by the District Board of Tanjore who urge the construction of the Tirutaraipundi-Vedaraniem section of it in preference to the Kumbakonam-Mannargudi line which the Madras Government consider to be of primary importance. The South Indian railway was authorized to survey the Tirutaraipundi-Vedaraniem section, 20 20 miles, on behalf of the Tanjore District Board in order that the rival claims of the two lines might be carefully investigated. The survey has since been completed, but the results have not yet been received by the Railway Board.
·* 5′6°	207'35	2,31,94,256	
5' 6"	173'94	2,35,55,035	Surveys were carried out by the Great Indian Peninsula railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred.
5′ 6*	17972	2,02,43,748	minute has been deterred.
*			

APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not-
N-concld.  North and South railway-concld.	,		
(iii) Bellarpur-Warangal (or	•	•	
Kazipet)—			
Eastern route—Bellarpur vid Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Pro- vinces and Nizam's Hyder-	Great Indian Peninsula railway.	Bellarpur and Warangal	Surveyed ,
abad).  Western route - Bellarpur via Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Pro- vinces and Nizam's Hyder- abad).	Ditto	Ditto	Ditto
Direct route—Bellarpur to Kazipet with a branch to Warangal (Central Provinces and Nizam's Hyderabad).	បរុស្ត្រ	Ditto	Ditto
The proposals connected with the southern portion of the scheme are:—	9,1		
(i) Ramesvaram to Ramnad (Madras).	South Indian railway	Ramesvaram and Ramnad	Not surveyed
(ii) Ramnad, via Trichinopoly, to a point between Tiruk- koyilur and Penruti (Mad-	Ditto	Ramnad and a point between Tirukkoyilur and Penruti.	Ditto
(iii) From the terminus of (ii) to	Ditto	Terminus of (ii) and Arkonam	Ditto
Arkonam, (Madras). (iv) Renigunta-Gudur (Madras)	Ditto	Renigunta and Gudur	,
Alternatives to (iii) and (iv).			*
Villupuram-Madras (Mad- ras).	Ditto	Villupuram and Madras	•••••
Chingleput-Arkonam (Mad- ras).	Ditto	Chingleput and Arkonam	
Villupuram to the terminus of (ii) (Madras).	Ditto	Villupuram and the terminus of (ii).	
Northern India and Ceylon connec- tion.	<b></b>		Min
P.  Paddapenki-Parvatipur branch			
(Madras).	•••••	*****	*****
Palghat-Palni railway (Madras) .	Bas		···•
Palni-Satyamangalam railway (Madras).	*****	Palni to Satyamangalam with a branch from— Satyamangalam to Mettupalaiyam.	Surveyed Do
Panchkura-Luff Point (Bengal) .	Bengal-Nagpur railway	Panchkura and Luff Point	Not surveyed *
		•	
		1	

DIX 38-A-contd.

Gauge.	Length,	Estimated cost.	Remarks,
	Miles,	Rs.	
5' 6"	190'73	2,32,30,222	* .
5' 6"	184'35	<b>€</b> 1,92,92,845*	Surveys were carried out by the Great Indian [Peninsula railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred
<sup>°</sup> 5′ 6″	148.62	¥,44,36,200°	•
5′ 6″	43		The proposal contemplates the laying of a mixed gauge between Rainnad and Mandapam, 23 miles, and the construction of 20 miles
5' 6"	195		of new line. New construction.
5′ 6″	80	•••••	Ditto.
5′ 6″	513	•••••	Conversion from the existing 3' 31" to 5' 6" gauge.
5' 6"	101	******	Ditto Ditto.
5' 6"	39	,	Ditto . ditto.
Mixed 3' 3%" and 5' 6".	*****	*****	Laying of a third rail,  The projects relating to the southern portion of the scheme were recommended by a Railway Commission which assembled in Madras in February 1903 with a view to effecting a through standard (5' 6") gauge connection between India and Ceylon.
111701	*****	*****	See remarks under "North and South railway".
•••••	***194	<b>261</b> Dab	See " Dusi-Salur light railway ".
****			See "Dindigul-Palghat railway" of which it forms a part.
3' 3%"	84:36	84,33,040	
3' 3#"	17:53	25,03,225	
5′ 6″	2 <b>5</b>		This project was proposed by the Bengal-Nagpur Railway Company in 1900, coupled with proposals for establishing an export coal depôt at Luft Point. The latter question was investigated in 1903 by a Commission, whose conclusions were that a coal depôt at Luft Point would be of little use to the industry as a whole; that, though practicable, it would probably be costly; that it is not at present desirable to establish one at Luff Point; and that if established it should be in the hands of the Port Commissioners of Calcutta. The Government of India decided that the Port Trust of Calcutta should have the first refusal of constructing any such depôts or jetties at Luff Point or in its neighbourhood, and that, should that body decline to undertake the work, Government would be prepared to consider definite proposals from any substantial private firm or company for undertaking the combined scheme at its

<sup>\*</sup> Excluding rolling stock.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.		Whether surveyed	or not.
P-concld.	,				
Pandharpur-Miraj extension (Bombay).	Barsi Light railway	Pandharpur and Miraj•	•••	Survey sanctioned	•••
Parlakimedi-Baruva light railway (Madras).	•••••	*****			
Pathankot-Baijnath (or Palampur) (Punjab).	·····			••••	
Pathar Kandi Bazar-Magura Cherra tramway (Eastern Bengal and Assam).	*****	•			
Patiala-Jakhal railway (Punjab)	North Western railway (Rajpura-Bhatinda).	Patiala and Jakhal	•••	Surveyed	•••
Patiala-Jakhal railway extension (Punjab).	North Western railway (Southern Punjab).	Jakhal vid Hissar, Loharu Kanaud to Narnaul.	and	Not surveyed	
Patti-Lodhran railway (Punjab) .	North Western railway (Amritsar-Patti).	Patti to Lodhran við Kasur, Ha Dipalpur, Haveli and Pakpat	ijra. tan.	Under survey	• •
Pegu-Syriam railway (Burma)	Burma railways	Pegu and Syriam		Surveyed	•••
Pertabganj-Birpur-Ghoraghat rail- way (Bengal).	Bengal and North-Wes- tern railway (Tirhoot section).	Pertabganj and Ghoraghat	•••	Surveyed	•••
Phirangipuram-Gurzala branch (Madras).	Southern Mahratta, rail-	Phirangipuram and Gurzala		Surveyed	
Phulbari-Sumjhia branch (Eastern Bengal and Assam).	Eastern Bengal State	Phulbari and Sumjhia		Surveyed	
Pilibhit-Barmdeo branch (United Provinces).	Rohilkund and Kumaon railway (Lucknow-Barcilly).	Pilibhit and Barmdeo	•••	Surveyed	•••
Pilibhit-Shahjahanpur railway (United Provinces).	Rohilkund and Kumaon ratiway. (Lucknow-Bareilly).	Pilibhit and Shahjahanpur		Under survey	•••
Podanur-Palni railway (Madras).	Madras railway	Podanur and Palni		Surveyed	•••
Pokhrayan-Auriya branch (United Provinces).	Great Indian Peninsula	Pokhrayan and Auriya		Reconnoitred	•••
Prome-Magwe-Meiktila extension (Burma).	Burma railways	Prome and Meiktila .		Not surveyed	•••
• Prome-Zadalin railway (Burma).		*****		,	
Puri-Astrang branch (Bengal)	Bengal-Nagpur railway.	Puri and Astrang		Not surveyed	•••
Pyinmana-Magwe railway (Burma)	Burma railways	Pyiwin to Kyanzu		Surveyed	•••
		Kyanzu to Magwe	•••	Not surveyed	•••
R.				_	
Raichur-Wondalli railway (Hydera- bad, Nizam's).	Great Indian Peninsula railway.	Raichur and Wondalli		Surveyed by the ters.	promo-
•		,			

DIX 38-A—continued.

### corrected up to 31st December 1906.

Market Committee

Gange.	Length.	Estimated cost.	Remarks.
Gauge.	#		A
	Miles.	Rs.	
2' 6"	77		The survey is being carried out by the Barsi Light railway from Imperial funds.
******		*****	See under " Ganjam District light railways".
	**1 ***		See " Kangra Valley railway ".
******			See under "Sylhet District tramways".
5' <b>6"</b>	54'35	Peress	This line has been proposed by the Patiala Durbar and would form a chord between the Rajpura-Bhatinda and the Southern Punjab railways. The preparation, at the cost of the Durbar, of alternative projects on the 3'38' and 5'6" gauges has been sanctioned. The survey has been completed and the detailed projects are awaited.
*****	131		This line has been proposed by the Durbars interested. The proposals are under consideration.
5' 6"	242	<b></b>	This line will be constructed by the State as an integral part of the North Western railway. The Lodhran-Mailsi section, 39.7 miles, has been surveyed and is estimated to cost Rs. 17,94,793 on the 5.6 gauge. It will comprise a large portion of the Changa Manga-Pakpatan project.  The Amritsar-Patti Railway Company have applied for a concession to extend their line from Patti to Kasur. The application is under
3' 3%"	67.68	53,30.984	consideration.
3' 33"	15	10.303	This line has been proposed to take the place of the existing Pertab- ganj-Khanwaghat section, which will be abandoned. The results of survey have not been received by the Railway Board.
3′ 318″	50.64	12,59,641	
3′ 31″	13'48	4,41,745	
3′3≹″	38.75		A resurvey of this line was ordered by the Home Board of the Robilkund and Kunnon railway. This has been completed and the results are awaited. The line will be an extension of the Lucknow-Bareilly railway and will be constructed from funds to be provided by the State. It will serve the lower Kumaon and the forests on the banks of the Sarda river.
3′ 3€″	56	·····	The Rohilkund and Kumaon Railway Company urged to be allowed to construct on the metregauge a railway from Pilibhit vid Shahjahanpur to Sitapur, but the Secretary of State has approved of the construction by the Company of the Pilibhit-Shahjahanpur section only, the remainder being superseded by the Rosa-Sitapur line to be constructed as an integral part of the Oudh and Rohilkhand railway.
5′ 6 <b>″</b>	65'24	88,04,307	This line is an alternative to the Palghat-Palni railway.
2' 0*	28	7,28,000	The line was reconnoitred in 1899 but the results have not yet been submitted.
3' 3#"	176	1,13,00,000	This line was recommended in 1895 by the Chief Commissioner of Burma as one that would tap the prosperous oil fields at Yenanchoung.
	,	<b>6</b>	See " Assam-Burma connection railway."
5′ 6″	34	27,20,000	This line will, it is stated, have a certain protective value in famine times and, if aligned parallel to the seashore and about 6 or 8 miles away, will pass through thickly populated tracts.
3' 3 <b>%</b> " 3' 3 <b>%</b> "	54°09 66	39,34,029	This line was proposed by the Government of Burma in 1905 with a view to providing useful work in case famine should occur in the adjoining dry zone districts.
3' 6"	43	12,53,336	This line was proposed by a syndicate to serve the Wondalli gold mines and the proposals were approved by the Secretary of State in 13co, but the scheme has not advanced. It will form a feeder to the Great fiddian Peninsula and Madras railways.

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
R-soncld.  Raipur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpuprailway		Partly reconnoitred
Rangamatighat-Ghagrapara tram- way (Eastern Bengal and Assam).		<b></b>	
Rangya-Tezpur railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Rangya and Tezpur	Surveyed
Rawalpindi-Murree railway (Pun- jab).	North Western railway .	Rawalpindi and Murree	Reconnoitred by the promoter.
Rewah-Sutna railway (Central India).	f	Rewah and Sutna	Surveyed
Rosa-Sitapur railway (United Provinces).	Oudh and Rohilkhand railway.	Rosa and Sitapur	Surveyed
Rowsara-Khagaria light railway (Bengal).	Bengal and North Western railway (Tirhoot section).	Rowsara and Khagaria	Apparently reconnoitred by the District Engineer, Monghyr,
S.			
Saidpur-Titalia branch (Eastern Bengal anu Assam).	Eastern Bengal State railway.	Saidpur and Titalia	Surveyed
Salem-Attur branch (Madras)	Madras railway	Salem and Attur	Surveyed
Salem-Porto Novo railway (Madras).	Madras railway	Salem and Porto Novo	Surveyed
Samastipur-Rowsara light railway (Bengal).	Bengal and North Western railway (Tirhoot section).	Samastipur and Rowsara	Not surveyed
Samastipur-Rowsara-Padri extension (Bengal).	Bengal and North West- ern railway (Tirhoot section).	Samastipur and Padri	Under survey
Sarabalpur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpur railway	Sambalpur and Khurda	Surveyed
Santipur-Kalna extension (Bengal)	Eastern Bengal State railway.	Santipur and Kalna	See "Remarks"
Tyre .	*	4.	

## DIX 38-A.—continued.

Length.	Estimated cost.	Remarks.
Miles.	Rs.	
, 295 <del>1</del>	. 3,02,51,043	This line was proposed as an alternative to the Sambalpur-Khurda railway. The Raipur-Sonpur section, 160 miles, was reconnoited, the remaining portion being surveyed as part of the Sambalpur-Khurda railway. The Raipur-Vizianagian railway, which is now under construction, supersedes a section of this line.
****** &		See "Mangaldai tramway."
72 <sup>.</sup> 34	<b>27,19,983</b>	This line is strongly supported by the Government of Eastern Bengal and Assam on the grounds that it would serve an important tea district in the Mangaldai sub-division and afford a powerful stimulus to the reclamation of the savannah country which is becoming gradually settled with time-expired garden coolies.
40	36,88,537	This line has been proposed by private enterprise. The estimates are for an electric railway excluding interest during construction and maintenance and promotion charges. Including these charges the estimated cost is Rs. 44,78,537.
32	7,61,810	This line will connect with the East Indian railway at Sutna. It was proposed with a view to providing relief on the occurrence of scarcity in the Rewah State. The line will probably be constructed by the Durbar.
51.36	38,74,471	This line supersedes the Shahjahanpur-Sitapur section of the Pilibhit-Sitapur railway proposed by the Rohilkund and Kumaon Railway Company. The Secretary of State has approved of its construction as an integral part of the Oudh and Rohilkhand railway.
44	10,00,000	This line was proposed by the District Board of Monghyr in 1905. In conjunction with the Samastipur-Rowsara light railway proposed by the District Board of Darbhanga, it will form a chord between Samastipur and Khagaria stations on the Tirhoot State railway. The District Board have signified their intention of withdrawing their proposal in favour of the Darbhanga-Khagaria and Samastipur-Padriextensions proposed by the Bengal and North-Western railway, provided that the line is taken in hand before the end of 1908.
66	29,84,000	This project has been held over until the site for the new Ganges bridge and the system of lines connected with it are finally settled.
36.06	17,59,555	In 1903 the Secretary of State sanctioned the construction of this line as a State railway, but the commencement of work was not authorized pending provision of funds. The District Board of Salem has since expressed a desire to construct it on the metre gauge, but no decision has yet been come to as to how the capital required for its construction is to be raised.
216	69,86,000	This line also passes through Attur and therefore comprises the Salem-Attur project. It was proposed in 1887 as a famine protective line by the Government of Madras who have since put forward the Trichinopoly-Tirukkoyilur railway in substitution of it, The approximate cost on the 5'6" gauge is estimated at Rs. 86,00,000.
171	6,25,000	The District Board of Darbhanga proposed the construction of this line through the agency of a company under Bengal Tramways Act III of 1883. The Bengal and North-Western railway have since proposed an alternative line from Samas ipur to Padri vid Rowsara and the District Board have intimated their willingness to withdraw their proposal in favour of the latter line if its construction is undertaken within a reasonable time.
34	•••	This line has been proposed by the Bengal and North Western railway and is alternative to the Samastipur-Rowsara light railway put forward by the District Board of Darbhanga,
190	2,37,00,000	The Government of Bengal has urged the early construction of this line by the State on administrative and political grounds.
<b>6ŧ</b>	••• •	This line will be an extension of the Ranaghat-Krishnagar branch. In 1904 orders were issued for the preparation of a detailed project for the extension and of alternative estimates for connecting the branch with the Ranaghat-Godagari railway on the 5' 6" gauge—  (i) by a 2' 6" gauge line from Raghabpur station to meet the 5' 6" gauge railway on the west side of the Churni bridge;  (ii) by extending (i) over the bridge right up to Ranaghat along the 5' 6" gauge alignment on a 4-rail mixed gauge.
	Miles. , 295\frac{1}{2}  72'34  40  32  51'36  44  66  36'06  116  17\frac{1}{2}  34  190	Miles. Rs. , 295\frac{1}{2} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

the province in which it is situated.	with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed	or not
S—cont d.				•
Sara bridge (Eastern Bengal and		******	, ,,,,	
Sara-Sirajganj-Jagannathganj rail- way (Eastern Bengal and Assam).	Eastern Bengal State	(i) Sara to Sirajganj	Surveyed	•••
		(ii) Sirajganj to Brahmaputra	Do.	•••
		(iii) Brahmaputa left bank to Jagannathganj with Subarnakhali branch.	Do.	•••
Saraikala-Abbottabad-Srinagar rail- way (North-West Frontier Pro- vince and Kashmir).	North Western railway	Saraikala to Srinagar vid Ab- bottabad	Do.	***
•		Alternative Mandra to Srinagar vid Panjar	Do.	
	•			*
Satara Road-Satara City railway (Bombay).	Southern Mahratta rail- way.	Satara Road and Satara City	Surveyed	•••
Sealtic-Lala Bazar tramway (Eastern Bengal and Assam).	···	*****	***	
Shadipalli-Mehoo Suboo light railway (Bombay). Shadipalli-Samara light railway	}	·····	·	
(Bombay). Shambhuganj-Gauripur branch. (Bastern Bengal and Assam).		•••••		
Shibnibash-Kotchandpur-Magura branch (Bengal).	Eastern Bengal State rail- way.	The three alignments surveyed and estimated for are—		
		(i) viá Khallispur, Durgapur and Jhenida	Surveyed	•••
		with a branch from Jhenida to Sulkopa.	Do.	•••
		(ii) vid Khallispur and Kali- ganj direct to Magura	Do.	•••
		with a branch from Kaliganj to Sulkopa, (iii) vid Khallispur, Kaliganj	Do. Do.	•••
		and Jhenida	Do.	***
Charles The beignin	P	with a branch from Jhenida to Sulkopa.		•••
Shwebo-Thabeitkyin railway (Burma).	Burma railways	Shwebo and Thabeitkyin	Surveyed	•••
Shwebo-Yeu light railway (Burma) (New project).	Burma railways	Shwebo and Yeu	Survey sanctioned	•••
Sihor-Palitana branch (Kathiawar, Bombay),	Bhavnagar-Gondal-Juna- gad-Porbandar rail- way.	Sihor and Palitana	Surveyed	, <b>**</b> *
Silchar-Duarbund tramway (Eastern Bengal and Assam).	)			٠,
Silchar-Tikalpur tramway (Eastern Bengal and Assam).	<b> </b>	•••	•••	
Singhjani Sherpore-Nalitabari rail- way (Eastern Bengal and Assam)		*****		
Singia-Madaripur-Chandpur rail- way (Bengal and Kastern Bengal and Assam).		Singia and Bhedarganj	Sugreyed	و ( الحجر ) و ( الحجر)
			The state of the s	

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge	e.	Length.	Estimated cost.	Remarks.
		Miles.	Rs.	
•••			•	See "Ganges bridge at Godagari or Sara".
5'	6*	49'48	62,09,669	The estimates exclude the cost of a steam ferry across the Brahmaputra river amounting to Rs. 9,30,000.
5′	6"	3.55	3,70,008	The project has been held over pending a decision on the question of a bridge over the Ganges at Sara.
3'	31"	26.05	± 15,38,521	
<b>(</b> 5'	6"	200	2,98,85,284	The project, as now revised, provides for a 5' 6' gauge line from
<b>\</b> 3'	31"	203	2,44,93,474	Saraikala to Abbottabad worked as part of the North Western rail- way, and for a metre gauge line worked by electricity from Abbot-
5'	6"	182	3,02,04,184	tabad to Srinagar, the portions within British and Kashmir terri- tories being constructed and owned by the Government of India
{ :	38"	185	2,42,66,519	and the Durbar respectively.  A resurvey of the Sagaikala-Abbottabad section, 48 miles, has been ordered with instructions to prepare comparative estimates on the 5' 6" gauge with ruling grades of 1 in 70 and 1 in 40 respectively.
3	38"	10		The project estimates are awaited.
***				See under " Cachar District tramways".
•••		•••		See under " Light railways in Sind ".
		•••		See under "Dacca-Mymensingh railway extensions".
	5' 6" 5' 6" 5' 6" 5' 6" 5' 6"	51'75 12'00 48'00 19'75 55	} 49,94,494 } 53,07,874 } 52,49,115	This branch was proposed on the 2'6" gauge by a Calcutta firm in 1896 and is alternative to the Bongong—Kotchandpur line put forward by the late Bengal Central railway on the 5'6" gauge. The Government of India expressed a preference for the former line and decided that it should be constructed on the same gauge (5'6') as the parent line. Of the alignments examined, the Manager, Eastern Bengal State railway, recommends No. (iii), the branch to Sulkopa being postponed until the trend of traffic on the Kumar river north of Magura has been definitely ascertained.
3′ 3	\$"	30.02	14,42,845	This line was proposed to tap the Kabwet collieries and to open up the Ruby Mines district. If it stops at Letkobin, in which case the collieries will be served equally well, the length would be 22.75 miles and cost Rs. 9,93,840.
Not stat	ed	22		This line has been designed to open up the country to be irrigated by the Shewbo and Yeu canals.
3′ 3	<u>.</u>		5,20,791	This line was proposed by the Palitana Durbar, by whom it will probably be constructed. It would facilitate pilgrimages to the sacred shrines of Palitana to which pilgrims flock twice a year and would also form part of the direct route to the port of Shiah Bet on the south coast of Kathiawar.
	•••	•••		See " Cachar District tramways".
	•••			See under "Dacca-Mymensingh railway extensions".
5	,' 6 <b>*</b>	82'15	1,92,65,833	The cost by sections is as follows—  Miles. Cost.  Singia to Madaripur 63'34 1,23,46,885  Madaripur to Bhedarganj 18'81 69,18,948  The Madaripur-Bhedarganj section is considered impracticable on the grounds of cost.

## APPEN

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
S-concld. Sirajganj-Ullapara railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Girajganj and Ullapara ·	Surveyed by the promoters
Sonaripur-Ramnagar ghat extension (United Provinces).		•••••	•••
Sonepat-Saharanpur branch (Punjab and United Provinces).	East Indian railway (Delhi-Umballa-Kalka).	Sonepat and Saharanpur	Not surveyed
Sointilla-Sonpur branch (Bengal) .	Bengal-Nagpur railway .	Sointilla and Sonpur	Surveyed
Southern Shan States railway (Burma).	Burma failways	Nyaungyan and Sang Hai	Surveyed
•	•		
Sri Madhopur-Borawar Chord (Rajputana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Borawar	Not surveyed
Sir Madhopur-Sikar branch (Raj- putana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Sikar	Surveyed
Srimangal-Manumukh tramway (Eastern Bengal and Assam).	]		
Sutang-Madna tramway (Eastern Bengal and Assam).		•••••	•••
Sylhet District tramways-			
Sutang-Madna tramway (Eastern Bengal and Assam).		Sutang and Madna	Reconnoitred by the pro- moters.
Srimangal-Manumukh tramway (Eastern Bengal and Assam).		Srimangal and Manumukh	Ditto Ditto
Kalaura-Chhatak tramway (Eastern Bengal and Assam).	Assam-Bengal rail- way.	Kalaura and Chhatak via Sylhet	Ditto Ditto
Karimganj-Chandi Khira tram- way (Eastern Bengal and Assam).		Karimganj and Chandi Khira with a branch from Pathar Kandi- Bazar to Magura Cherra,	Ditto Ditto
Т			*.
Tando Muhammed Khan-Mirpur Buttora branch (Bombay).		******	***
Taragupet (Bangalore)-Chikballa- pur light railway (Mysore).	•••	···.···	•••
Taungup branch (Burma)	***	10.050	•••
Tinnevelly-Tiruchendur railway (Madras).	South Indian railway	Tinnevelly and Tiruchendur	Surveyed
Trichinopoly-Thondi branch (Madras).	South Indian railway	Trichinopoly and Thondi	Not surveyed
			₩. ఈ

## DIX 38-A .- continued.

Gauge.	Length.	Estimated cost.	Remarks,
	Miles.	Rs.	,
2'6"	18	1-1,00,000	This line has been proposed for construction by private enterprise in the interests of jute and other traffic, with the help of a guarantee from the District Board of Pabna. Further proposals are awaited from the promoters.
•••	***		See " Dudhwa branch extension to Ramnagar ghat ".
5' 6"	6о	48,00,000	
5′ 6*	48.24	30,62,444	This branch was projected to connect at Sonpur the Raipur-Viziana gram railway with the Sambalpur-Khurda line.
2′ 6°	112.3	68,57,667	This line was projected in order to afford railway communication be tween the wheat growing districts in the Southern Shan States and the port of Rangoon.  The Railway Board deputed an officer in 1906 to examine on the spot the project prepared for a 2 6 gauge line and have since directed the preparation of a detailed project on the metre gauge in accordance with the report submitted by the officer.
3' 3%"	•••		This chord has been suggested in order to reduce the through metr gauge mileage between Delhi and Karachi.
3' 3%"	30.68	8,69,413	
	•••		See under "Sylhet District tramways".
2′ 6″	30	11,54,407	These lines were proposed in the interests of the tea industry and a feeders to the Assam-Bengal railway. The proposals fell through
2'6"	221	8,81,567	owing to the inability of the local administration to guarantee intereon capital at 3 per cent. per annum which the promoters had aske for.
2' 6"	53	20,04,376	The Kalaura-Chhatak project is superseded by the Kalaura-Sylhe line, which is now under construction.
2′ 6″	43	12,00,000	
			See " Lower Sind branches ".
•••	•••		See Love Sind Planeires ,
***			See "Bangalore (Taragupet)—Chikballapur light railway ".
***			See under " Assam-Burma connection railway ".
3' 3 <b>!'</b>	37:60	20,52,003	This line has been proposed by the District Board of Tinnevelly fro whom proposals for its financing are awaited.
3' 31"	. 86	37,50,000	A part of this scheme will probably be financed by the District Boa

## APPEN

		•	The state of the s
Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not
Trichinopoly-Tirukkoyilur railway (Madras).	South Indian failway	Trichinopoly and Tirukkoyilur	Reconnoitred
Tumsar road-Katangi railway (Central Provinces). V.	Bengal-Nagpur railway	Tumsar road to Katangi Sidings to serve the mines	Surveyed Ditto
Vadnagar (or Visnagar)-Vijapur extension (Bombay).		.*****	
Vaigai Valley railway (Madras) .	South Indian railway	Ammayanayakkannur to Kotagud	<u> </u>
	•	with extensions :—  (i) Perivakulam to Krishnama Naik's tope.	
		(ii) Near Theni (mile 39) to Uttamapalaiyam.	j
Visnagar (or Vadnagar)-Vijapur extension (Bombay).	Bombay, Baroda and Central India railway	Visnagar to Vijaput  Alternative,	Surveyed
	(Gaekwar's Mehsana).	Vadnagar to Vijapur	Do
Vizianagram-Bimlipatam branch (Madras).	Bengal-Nagpur railway	Vizianagram and Bimlipatam	Not surveyed
Υ.			
Yerragudipad-Jammalamadugu branch (Madras).	Madras railway	Yerragudipad and Jammalamadu	- Surveyed
2.			
Zadabin-Zibingyi railway (Burma)	•••	*****	*****
•			
			,
		•	

## DIX 38-A-concluded.

	Gauge.	Length.	Estimated cost.	Remarks.
		Miles.	Rs.	•
	3' 3 <del>3</del> "	96.75	74,43,000	This line was recommended by the Madras Government in 1899 in substitution of the Salem-Porto Novo project and was also recommended by the Railway Commission of 1903 as part of the 5' 6" gauge route connecting India and Ceylon. It will shorten the distance between Madras and districts south of Trichmopoly by 37 miles. The South Indian Railway Company have, since the close of the year, beer permitted to survey this line, the survey being adapted to the requirements of the 5' 6" gauge.
	5' 6"	32.89	20,40,477	This line has been projected in order to serve the manganese mines in the Central Provinces.
	5' 6"	.10	5,44,435	The Cantal A tovinous
	•••			See "Visnagar (or Vadnagar)-Vijapur extension".
ſ	2' 6°	55	h	This line was surveyed by a syndicate who estimated an approximate outlay of Rs. 29,377 per mile. A concession was granted to the syr
	2' 6"	5	See "Remarks"	dicate in 1901, but in \$905 they renounced it owing to their inabilit to ruse the capital required.
Į	2' 6"	18		A large portion of this project is covered by the Ammayanayakkannun Ultam i palaiyam line proposed by the District Board of Madura.
	3' 3#"	16	5,34,280	This line will lie entirely within the territory of the Baroda Darbar wh will construct it Earthwork for famine relief purposes was sanctione
	3' 33"	16.93		in 1904.
	5' 6"	15	9,39,000	In 1905 a Madras firm urged the construction of this line by the Statin the interests of traffic in manganese, but the scheme is not supported by the Government of Madras.
{	a' 6" 5' 6"	} 24.02	{ 10,45,904 12,46,831	
	•••		***	See " Assam-Burma connection railway".
				,
			1	

## APPENDIX 39.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and goods under gross receipts, total train-mileage and gross ton-mileage.

5' 6" GAUGE LINES.

				GROSS R	eceipts.	TRAIN.	MILES.	TON-I INCLUDII WEI	MILES NG DEAD GHT.
	RAILWAY SYSTEM. (Vide APPENDIX 38.)		Total working	Appeni	or <b>x</b> 18.	APPENI	oix 18.	APPEN	orx 18.
£	(* ************************************			Item No. 21.	Item No. 89.	Itom <sup>e</sup> No. 22,	Item No. 90.	Item No. 78.	Item No. 109
Number.				Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods
			(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands.)	(In thousands.)	(In millions.)	(In millions.)
1 (a) {	Bengal-Nagpur	<b>.</b>	122-22	80-61	171-24	2,435•56	3,646-40	636.03	1,687 <b>·44</b>
, (a) <b>j</b>	Ratio	•••		1	212	1	1.20	1	2:65
1 (a) to	Bombay, Baroda and Central India		108.53	76-96	146-26	2,296·12	1,399-16	<b>587</b> ·19	899:17
2 (a) to (f)	Ratio			1	1.30	1.61	1	1	1.23
3 (a	Eastern Bengal State		53 1 <b>3</b>	51-40	83-59	1,890•44	1,422-49	4 <b>7</b> 5·87	592•88
( )	Ratio			1	1 63	134	1	. 1	1'25
4 (5) (5)	East Indian		321.75	251.00	562.05	7,527·83	9,818-47	2,842-72	6,09 <b>5</b> ·27
4 (a) to { (d).	Ratio	•••		1	2.24	1	1.30	1	2.60
	Great Indian Peninsula		820 55	190:35	442.98	7,484-77	8,216-61	1,908-85	3,575.89
5 (a) to (f).	Ratio			1	2.33	1	1.10	. 1	1.87
	Madras		127.09	79:87	127.60	2,270.79	2,793.73	555-51	1,102-94
6 (a) to { (d).	Ratio		0	1	1.60	1	1.23	1	1.99
1	Nizam's Guaranteed State		18:43	11:32	34:82	351 51	740-59	94.80	298-01
8 (a) & { (b). }	Ratio	···•		1	3.08	1	2 23	1	8·14
9 (5) 10	North Western State		355-24	212-10	458:36	8,499-13	9,837-19	1,976-87	4,441.50
9 (a) to {	Ratio	•••		1	2.16	1	1.16	1	2.2
10 (a)&	Oudh and Robilkhand State		88:53	78-59	77-27	3,183-80	1,998-51	786-37	825-28
10 (a) & { (b).	Ratio			1.02	1	1.59	1	1	1-12
							1		

### APPENDIX 39-concld.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and yoods under gross receipts, total train-mileage and gross ton-mileage.

3' 3%" GAUGE LINES.

				g GAUGE L	INES.				
				GROSS R	ECEIPTS.	TRAIN-	MILES.	TON-M INCLUDIX WEI	IILES NG DRAD GHT.
	RAILWAY SYSTEM. (Vide APPENDIX 38	,	Total working expenses.	Appeni	orx 18.	APPENI	oix 18.	APPEN	OTE 18.
ěr.	,			Item No. 21.	Item No. 89.	Item No. 22.	Item No. 90.	Item No. 73.	Item No. 109
Number.				Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods.
			(In lakhs.)	(In lakhs.)		(In thousands)		`	(In millions.
11 (0)	Assam-Bengal Ratio	•••	37·92 	16·96	22·41	618-76	977·19	114:46	216·81 1·89
	Bengal and North-Western		68-93	64.08	78·27	2,624-79	2,363*20		
(b).	Ratio			1	1.22	1.11	1	495.29	626·01
	Bhavnagar-Gondal-Junagad-Po	rbandar	10-98	11 <sup>,</sup> 83	9.00	372.04	236-44	59·30	49-63
(d). to	Ratio			1.31	1	1.57	1	1.30	1
(	Burma		98·70	71:40	82-47	2,029-06	3,088-61	412-14	689-11
15 (a) }	Ratio			1	1 16	1	1.52	1	1.67
3 (b) and (c).	Eastern Bongal State		58:32	41-26	56-80	1,885-29	1,299.64	201.16	820-7
(o). {	Ratio	٠		1	1.38	1.03	1	1	1.6
s (o) {	Hyderabad-Godavarı Valley	•••	16.11	10.32	19:18	373•82	560-73	69.39	111-8
(	Ratio	•••		1	1.80	1	1 50	1	1-6
18 (a) to {	Jodhpur-Bikaner	•••	18 <b>·6</b> ⊍	14-66	25 12	1	731.89	108-90	164-2
(, (	Ratio	•••		1	1.71		1 29	1	1.5
(g) to {	Rajputana-Malwa		129.47	97:14	175-70	8,799·67	4,281.48	657-91	1,212-3
•		***							
20 (a) & { (b).	Robilkund and Kumaon	•••	12.57	11.07	12-13	390.98	391.72	90.77	84-2
	South Tadian		81.00	79:41	62-67	2,893.50	2,274.63	412.84	479-0
21 (a) to {	Batio	•••		1.27	1	,	1,27403	1	1-10
,	Southern Mahratta		74-12	45.56	75-42	1,090-24	2,864:59	313·15	692-5
29 (a) to (j).	Ratio	•••		1	1.66	1	1:44	1	1.8

#### APPENDIX 40.

Memorandum by the Railway Board on the results of Indian Railway working 1906-1907 and proposals for 1907-1908, as published in the Financial Statement.

#### CAPITAL EXPENDITURE.

The capital expenditure during the yeaf 1906-1907 will amount to Rs. 14,61,16,000 (£9,741,100) being nearly a crore in excess of the expenditure for the year 1905-1906.

- 2. The expenditure in 1905-1906 includes a sum of approximately  $114\frac{1}{2}$  lakks advanced to the Delhi-Umballa-Kalka Railway Company for the construction of the Kalka-Simla railway, and adjusted against the head "48—State Railways, Construction" on purchase of the railway from the Company by Government. Excluding this special item, the increase over the expenditure in 1905-1906 will be nearly  $2\frac{1}{4}$  erores.
- 3. For the year 1907-1908 these figures have been greatly reduced. The estimate provides for spending a sum of  $13\frac{1}{2}$  crores (£9,000,000), a reduction of 10 per cent. on the provision of last year.
- 4. Under the head of lines already open, including the provision for additional rolling stock, the amount expended in 1906-1907 will be  $919\frac{1}{4}$  lakhs (£6,129,300), showing an advance of about 151 lakhs over the expenditure under the same head for the previous year. Under the same heads in 1907-1908 provision is made for 1,013 $\frac{1}{4}$  lakhs (£6,755,000), an increase of about 10 per cent.
- 5. A comparison showing capital expenditure for 1907-1908 and the previous five years is contained in the following statement:—

	Lines already open, including additional rolling stock.	LINES UNDER				
·	open, includ- ing additional	Started in provious yours.	Started in current year.	Total.	Equivalent in sterling.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	£.	
1902-1903 (actual expenditure) . 1903-1901 ( ,,  ,,  ) . 1904-1905 ( ,,  ,,  ) . 1905-1906 ( ,,  ,,  ) . 1906-1907 (latest grants) . 1907-1908 (proposed grants) .	4,81·74 5,58·77 5,02·76 7,68·19 9,19·39 10,13·2+	4,52·50 3,13·68 4,86·91 5,49·46 5,10·20 3,36·76	71:52 84:62 88:62 32:26 31:57	10,05.76 9,57.07 10,78.29 13,49.91 14,61.16 13,50.00	6,705,064 6,380,468 7,188,600 8,999,430 9,741,100 9,000,000	

<sup>6.</sup> The information showing in detail how the expenditure in 1906-1907 and 1907-1908 will be distributed is contained in statement A attached to this memorandum

The programme for 1907-1908 as originally framed contemplated an outlay of Rs. 15 crores. Financial considerations, however, necessitated its reduction to Rs. 12 crores, for which figure it received Secretary of State's sanction. It was subsequently increased by Rs. 1½ crores and now stands at Rs. 13½ crores.

7. The mileage of lines of all gauges open to traffic on 1st April 1906 was 28,611 and under construction 2,534; on 1st April 1907 there will be 29,571 open and 2,535 under construction. At the end of the coming year there will be 1,703 miles under construction.

### RAILWAY REVENUE ACCOUNT.

8. The Railways of India, taken as a whole, have for a succession of years shown a balance to the credit of general revenues, after allowing for working expenses, interest on capital expended, charges for annuities in redemption of capital and miscellaneous railway expenditure. The following table shows the approximate figures for 1906-1907 compared with the actual results for the previous five years:—

[Figures in rupees, omitting 000.]

				Gross receipts.	Working expenses.	Interest charges, etc.	Surplus of Revenue over expenditure.	Equivalent in sterling.
,				R	R	R	R	£
Actuals—					•			
1901-1902			.	80,33,90	14,23,85	14,88,06	1,26,99	846,600
1902-1903				30,20,08	14,74,08	15,11,66	84,34	228,900
1903-1904	٠.			32,33,68	15,56,72	15,47,86	1,29,10	860,700
1904-1905		_		36,03,37	16,94,32	15,93,23	3,15,82	2,105,500
1905-1906	•	•		36,89,12	*16,95,16	16,93,67	3,00,29	2,001,900
Estimate-							VI.	
1906-1907				39,71,89	19,14,29	17,33,96	8,23,64	2,157,800

<sup>\*</sup>Norsi-The figures to end of 1904-1905 include the companies' shares of surplus profits, now shown under interest charges, etc.

Compared with the results of the previous year the figures for 1906-1907 show an improvement of Rs. 23,85,000 (£155,900). The receipts are more by Rs. 2,82,77,000 (£1,885,200), the working expenses are higher by Rs. 2,19,13,000 (£1,460,900), while interest charges, etc., have increased by Rs. 40,29,000 (£268,400).

#### GROSS RECEIPTS.

- 9. In 1905-1906 the gross receipts of railways showed a large improvement over those of the previous year consequent on the opening of new lines, development of passenger traffic on existing lines, and larger movements of food grains as a result of scarcity in Guzerat, Kathiawar, Central India and certain districts in the Madras and Bombay Presidencies. The improvement was general on all railways with the exception of the North Western railway, on which there was a falling-off of over 60 lakhs due mainly to short exports of wheat to Europe owing to the uncertainty as to the prospects of the wheat crops of 1906-1907.
- 10. In the current year while there has been a set-back in the earnings of the Great Indian Peninsula railway due to a falling-off in traffic in raw cotton, wheat and other grains, the earnings from other railways have continued to expand, notably under goods traffic of the East Indian railway, and in jute and grain traffic on the Eastern Bengal State railway, the latter being the result of soarcity in Eastern Bengal. The earnings of the Indian Midland railway also show a phenomenal increase due to large movements of food grains and other merchandise, while those of the North Western railway are expected to reach practically the same figures as were obtained in 1904-1905.

AK

11. The more important increases are:

• .					Rs.
East Indian	•••	•••	***	•••	38,69,000
Eastern Bengal State	•••	•••	•••	•••	40,01,000
Indian Midland	•••	•••	•••	•••	24,22,000
North Western	,	•••	•••	•••	61,88,000
The principal decrease	being	-	•	ı	
Great Indian Paringula	•••	•••	•••	•••	19,22,000

#### WORKING EXPENSES.

12. The increase in working expenses during the year 1906-07 is estimated to amount to Rs. 2,19,13,000 (£1,460,900). This increase to a large extent is due to increased traffic on certain lines of which the North-Western, Eastern Bengal States and Indian Midland railways are the most prominent examples.

These three lines will have carned more than a crore and a quarter of rupees (£833,300) in excess of their carnings during the previous year, and this increase in earnings necessitates increased working expenses.

- 13. That working expenses would tend to increase was indicated by the Railway Board in their memorandum of last year. The reasons that were given for their opinion apply now as when written a year ago.
- 14. Railways in India have now to run faster trains, provide better carriages, improve the conditions under which third class passengers are carried, introduce a more elaborate system of signalling, and generally conduct their business under more up-to-date methods than were in use in the past.
- 15. Some of these improvements will lead to increased revenue. Some will not, but have to be provided to meet the public demands.
- 16. The cost of many of these improvements being in the nature of renewals has to fall to a considerable extent on revenue.
- 17. During the period this raising of the standard is being carried out working expenses must rise, though in the end, under some items, more economical working should be secured.
- 18. To enable railways to carry the heavy traffic offering the permanentway has to be improved and girders strengthened. Most lines now when making branches wish to use their light main line rails in these branches and renew the main line with heavier rails.
- 19. This is a sound business arrangement, but carrying out the policy indicated means that revenue has to renew before the rail itself is nearly worn out. The result is increased debits to revenue for a time, causing increased working expenses. The Board hope that a practical solution may be found to meet this difficulty, so that working expenses may be steaded and not liable to unnecessary fluctuations.

#### NEW LINES TO BE CONSTRUCTED.

20. Owing to the reduction in the programme, the heavy demands on account of open lines, and the large mileage of lines at present under construction, no expenditure on new lines is proposed during the year 1907-08.

#### OPEN LINE REQUIREMENTS.

21. The total amount allotted during 1907-1908 to open lines, viz., 10,18‡ lakhs (£6,755,000) out of a total for the year of 13,50 lakhs (£9,000,000), has been divided between general open line requirements and additional rolling-stock requirements approximately as follows:—

7			Lakhs.
			Ra.
1907-1908 {Open line requirements Rolling-stock		•••	445
(Rolling-stock	•••	•••	568

This shows a decrease of 64 lakhs under open line requirements and an increase of 186 lakhs under rolling-stock, in comparison with the provision made under these heads in 1906-1907, the figures for which were as follows:—

				Lakhs.
1906-1907	Open line requirements Rolling-stock	•••	***	509
2000-2001	Rolling-stock	•••		382

#### ROLLING-STOCK.

- 22. In their memorandum on the Budget last year, the Railway Board definitely stated that the then standard of equipment of Indian Railways in the matter of rolling-stock was below the requirements. Acting on this opinion they made the very large provision of 382 lakbs, to be spent for rolling-stock during the year 1906-1907, and this money has all been spent. The sum of 382 lakbs represents in sterling about  $2\frac{1}{2}$  million pounds and was  $\frac{3}{4}$  of a million pounds sterling more than the allotment provided for 1905-1906.
- 23. For the ensuing year 1907-1908, they have made a provision of 568 lakhs or about  $3\frac{3}{4}$  million sterling for rolling-stock, which provision has met in full the demands of all railways for grants for rolling-stock for that year.

This increased provision of rolling-stock, coupled as it is with the necessity for providing additional sums for open line works, to enable the increased stock to be worked efficiently, has exhausted the funds at the Board's disposal, with the result that no new lines can be put in hand, until next year at the earliest.

24. The Railway Board are as fully aware, as the public are, of the urgent necessity for more rolling-stock, and have consistently done as much as they were able, with the funds placed at their disposal.

# COMMUNICATION BETWEEN PASSENGERS AND GUARD OF A TRAIN.

25. The provision of an effective means of communication between passengers and the guard being a matter that seriously affects the safety of the travelling public, orders were issued by the Railway Board for the adoption on all railways in India of the type of communication now in general use in England. The North Western, Oudh and Rohilkund and Eastern Bengal State railways were instructed to at once provide this means of communication on now and rebuilt stock, and to fit the communication to the existing stock of all classes as rapidly as possible. The work of fitting the existing carriages of companies' railways is, with certain exceptions, required to be completed within two years from the date of the order.

#### GENERAL.

- 26. In order to encourage imports into tracts suffering from fodder famine the administration of the North Western railway was instructed to help the movement of bhusa from the Punjab, and specially from the canal colonies by quoting low rates. Rates were accordingly reduced by them, and the Oudh and Rohilkund, East Indian, Bombay, Baroda and Central India, Jodhpur-Bikaner and Gwalior Light railways followed suit. These reductions resulted in great benefit to the famine-stricken tracts.
- 27. Attention is invited to statements B and C attached to this memorandum which contain information of interest.

### STATEMENT A.

Statement of anticipated capital expenditure on railways, open and under construction, for the year 1907-1908.

No.					1	LA ILW	AY.					•				Grants allotted for 1908-1907,	Distribution grants during 1907-1908,
					_		LIN									æ	R
- 1			I. (1	)—S	TATE,	, BY	State	AGI	NCY.		•				- 1		
1	Eastern Bengal — Main line .					•					•					)	
2	Murshidabad Bras	nch														58.13	91•79
8	Kaunia-Bonarpar	a											•			2.77	***
.4	Jodhpur-Hyderabad (B	ritish	secti	on)												0.14	<b></b> 0·18
Б	North Western- Main line			. •									•			184-16	159-27
6	Jech-Doab (South	ern s	oction	1)												7.09	1.18
7"	Kalka-Simla												. •			45.94	5.07
8	Rohri-Samasata,	doubl	ing				•									39:34	13.65
9	Shahdara-Sangla															8.01	2.65
10	Oudh and Rohilkhand-					•				•				•		26.04	32*08
11	Allahabad-Jaunpu	u <b>r</b>		•												4.50	1.66
12	Warora Colliery														.	-1.68	
13	Roserve															•••	163.42
							Total	Open	lines	. Stat	e. b <b>v</b>	State	Ager	10V	١	374:44	470-59
		1. 6	ii) —8	STATI	e. Py		ENCY	_			_		_	•	ŀ		
14	Assam-Bengal .	(									•					25-15	25.0
	Bongal and North-Wes	· ·torn-	_	•	•	•	•	•	•	•	•	•	•	•	1	20 20	20 %
15	Tirhoot .	•	•	•	•	•	•	•	•	•	•	•	•	•		22.25	S 16.96
16	Sakri-Jainagar	•			•		•	•	•	•	• alm	•	•	•		<b>5</b> 22.20	1.50
16	Bombay, Baroda and C	lentra	l Ind	ia—							海				1	15:39	15.0
17	Main line .	•	•	•	•	•		•	•	•	•	•	•	•		0.03	
18	Palanpur-Deesa	•	•	•	•	•	•	•	•	•	•	•	•	•	.	35.41	07:0
19	Rajputana-Malwa	8. *	•	•	•	•	•	•	•	•	•	•	•	•	.		27:29
20	Rewari-Phulera		•	•	•	•	•	•	•	•	•	•	•	•	.	3.60	0.3
21	East Indian- Main line .											•				160-10	102.4
22	Agra Junction B	Beling	anj													10-00	8-0
23	Great Indian Peninsula Main line															49.54	94-1
24	Agra-Delhi chord	a.							٠	•	•				٠. ا	4.64	2.2
25	Bhopal-Itarsi (B		secti	(go			•									0.91	1.7
26	Madras— Nilgiri			•			•	•	•		•		•			0-53	1:9
27	North-East line				•			•			•			•		6-80	14.5
41	Nizam's Guaranteed St				•	•	•	•	•	<b>*</b> .	-	•	-	-			
28	Bezwada extensio	on	•	•	•	•	•	•	•	# Ç'	•	•	•	•	·	0.08	0.0
		•								•		Caz	ried (	or ex	٠,	884.37	805-4

# Capital Expenditure on Railways, 1907-1908-contd.

- 1		Rai þw	AY.	•								Granfy allotted for 1906-07.	Distribution of grants during 1907-08.
	•											Rs.	Rs.
							Bro	aght	forwa	rd		334 37	805.40
	A.—OPEN	LIN	ES-	oncla	≀.							٨.	
	I. (ii)-State, by Ac	ENCY	or Co	MPAN	ies-	conc	ld.						
	South Indian— Main line	•										27:00	29:25
29 30	Travancore branch (Native State sectio	۰,	•	•	•	•	•	•	•	•		0.03	0.20
91	(Poitin) mostion)	11) •	•	•	•	•	•	•	•	•		0.20	0.20
21	Southern Mahratta—	•	•	•	•	•	•	•	•	•		020	0 20
96												0.05	0.10
32	Guntakal-Mysore Frontier	•	•	•	•	•	•	•	•	•	. -	1700	0.10
	Tet	al Op	en Lin	es, St	ate, b	y Ago	ncy c	of Cor	mpani	ie <b>s</b>		361·65	334-15
	II.—FROM CAPITAL OF	e or n	GHAD.	ANTEI	en Co	M D 1 W	170				-		
	Madras-	(12)	W 0 2 2 2				1170.						
<b>3</b> 3	Main line	•	•	•	•	•	•	•	•	•	-	22.92	26.70
34	Calicut-Azhikal	•	•			•	•	•	•		-	12	0.40
35	Bombay, Baroda and Central India .	•	•	•	•		•	•	•	•		11	
		*									-		
		Tota	l Oper	1 Line	s, Old	l Gna	rante	ed Co	mpan	ies	$\cdot$	23.15	27.10
	III - Francisco Company	פינה פ	RR TH					_			-		
	III FROM CAPITAL OF COMPANIE			WW OT	ւթ գր	ABAN	TEED	Сом	PANII	88.	1		ł
	Bengal-Nagpur—			AN OI	LD GU	ABAN	TEED	Сом	PANII	RS.			
36				, ,		ABAN	TEED.	Сом	PANII	RS.		1	9:71
36 37	Bengal-Nagpur—		•			ABAN	TEED		PANII				9:71
	Bengal-Nagpur— Main line		•			ABAN	TEED		PANII			89-91	1
37	Bengal-Nagpur—  Main line		•			ABAN			PANII			} - 89·91	1
37 38	Bengal-Nagpur—  Main line					ABAN			PANII	•		89·91	1
37 38	Hengal-Nagpur—  Main line		•			ABAN			PANII			89-91	90-18
37 38 39	Bengal-Nagpur—  Main line		•			ABAN	TEED		PANII				90-18
37 38 39	Bengal-Nagpur—  Main lino	•	•			ABAN			PANII				90-18
37 38 39	Bengal-Nagpur—  Main line		•			A B A N			PANII			45-02	90-18
37 38 39	Bengal-Nagpur—  Main line		•			A B A N			PANII			45-02	42.60
37 38 39 40	Bengal-Nagpur—  Main line					A B A N			PANII			45·02 12·44	42.60
37 38 39 40	Bengal-Nagpur—  Main line					A BAN	TEED		PANII			45·02 12·44 2·18	42.60
37 38 39 40 41	Bengal-Nagpur—  Main lino					ABAN	TEED		PANII			45·02 12·44	42.60
37 38 39 40 41 42	Bengal-Nagpur—  Main line											45·02 13·44 2·18	42·60 24·91 4·55
37 38 39 40 41 42	Bengal-Nagpur—  Main line											45·02 13·44 2·18	42·60 24·91 4·55
37 38 39 40 41 42	Bengal-Nagpur—  Main line			·		· · · · · · · · · · · · · · · · · · ·				·		45·02 12·44 2·18 7·74 2·82	42·60 24·91 4·55
37 38 39 40 41 42	Bengal-Nagpur—  Main line			·		· · · · · · · · · · · · · · · · · · ·				·		45·02 12·44 2·18 7·74 2·82	42·60 24·91 4·55 9·18
37 38 39 40 41 42 43 44	Bengal-Nagpur—  Main line	Lini		Total				onor Co	· · · · · · · · · · · · · · · · · · ·	·		45·02 12·44 2·18 7·74 2·89	9·71 } 90·18 } 42·60 24·91 4·55

# Capital Expenditure on Railways, 1907-1908—contd.

No.			Bally	FAY.					•		Length.	Amount of estimate or approximate cost,	Outlay to end of 1905-1906.	Grants allotted during 1906-1907.	Distribution of grants during 1907-1906
	BCON	STR	UCT	ION	OF	LIN				· · · · ·	Milos.	Rs.	Rs.	Alleted during 1806-1807.  Rs. 6-58 1-07 29-40 35-50 137-00 19-00 11-19 4-12 7-80 21-79 4-45 2-46 280-66  1-84 0-29 23-50  \$ 52-82 \$	, ,
	I. (i)-	-Sta	TE, B	r Si	ATE A	der	CY.				2111001	2100	165.	166.	Rs.
	,	Lin	es in	Pro	gress.										
46	Cooncor-Octacamund				•						12	24.40	9.07	6.58	4.50
47	Eastern Bengal— Forbesganj-Nepal F	ronti	o <del>r</del>								6·5	2.22	0 65	1:07	0.13
48	Golakganj-Gauhati							•	•		151	98-26	54.81		20 0
49	Katihar-Godagari	•	•						·		105	104:86	36.60	•	18:0
30	Nagda-Muttra-	•	•	•	•	•	·	•	•		200	1,7100	20 00	2000	10.0
5 <b>0</b>	Main line	•	•	•	•	•	•	•		•	344	298-11	82:39	137.00	67:0
51	Baran-Kotah .	•	•	•	∢ .			•	•	•	40	37.59	1.07	19 00	13.0
52	North-Western- Khushalgarh-Kohat	conv	ersion	ימה ו	d Indu	ıs Bı	ridge				34	31.92	11-16	11-19	5.3
53	Kohat-Thal conversi										57	30 32			
54	Thal-Parachinar										59.6	85.22	}	4.12	2.0
55	Lodhran-Khanewal										56	45.15		7.80	15.7
56	Loi-Shilman .				•						38	100 <b>·0</b> 0	8:70	21.79	6.0
57	Shorkot Road-Chich	oki									* 131	81.34		4.45	17.2
58	Quetta-Nushki .										83	90.06	85.12	2.46	
								Tor	<b>≜</b> L			10,24 45	289:57	280 66	169 0
	I. (i1)—Sta	TE, B	Y Ag	ENCY	OF C	0 M P.	ANIE	9.							
		Lin	es in	Pro	gross.										
59	Assam Bengal— Akhaura-Bhairab Be	zar									19	14.30	1.79	1.84	4.0
60	Kalaura-Khooseara										16	7.80		0.29	4.0
	Bengal and North-West	orn-	-												
61	Tirhoot extensions										209	117-43	92.96	23.50	10.3
40	Burma-											40.05			
62	Dagu Loop	•	•	•	•	•	• .	•	•		66	40.05		]	3.0
63	Henzada-Kyangin	•	•	•	•	•	•	•	•	•	66	54.59	18.64	52.82	3.4
61	Pegu-Moulmoin.	•	•	•	•	•	•	•	•	•	122	112 88	65.65	ر	Ĺ 21·0
65	East Indian— Bhagalpur-Bausi										31	23.31	1.87	3.00	, ו
66	Gya-Hariharpur										100	144-69	,	C 15:00	
67	Hariharpur-Barakar										48	74.54	192 16	600	
68	Hooghly-Katwa .										65	58.46	1.45	5.00	37.7
69	Khurja-Hapur .				٠.						39	25.98	13.19	14:00	
70	Katwa-Barharwa										103	86.87	•••	0.70	
71	Ondal-Sainthia .										45	43.55	37·15	6.20	
•-	Great Indian Peninsula	-						•						,	
72	Harbour Branch	•		•	•	•	•	•	•	٠	8	45.61	6.98	8.67	9.7
73	Warora-Bellarpur	•	•	•	•	•	•	•	•	•	88	81.94	16.07	14.13	15
							_	ried (				881.50	447.91		1

# Capital Expenditure on railways, 1907-1908—contd.

	•		ĺ		1	1	
N o.	Rallway.		Length.	Amount of cutimate or approximate cost.	Outlay to end of 1906-1905.	Grants allotted during 1906-1907.	Distribu tion of grants during 1907 -1909
			Milos.	Rs.	Rs.	Rs.	Rs.
	Brought forward			881.50	447:91	151-15	101 02
	B.—CONSTRUCTION OF LINES—concid.						
	I. (ii)—STATE, BY AGENCY OF COMPANIES—concld.						
	Lines in Progress-concld.				*		
	Madras-				·		
74	Azhikal-Mangalore		77	129:05	100-21	20:30	3-49
	Southern Mahratta-			י		0.7	
75	Dhone-Kurnool (section of Hyderabad-Guntakal, No. 58)		32	11.32	•••	1.00	4.00
	South Indian-						
76	Rameswaram Extension		12	35.19	4.90	·91	
	Total			10,67.06	5 <b>5</b> 9·02	173 36	108.51
	II.—From Capital of old Guaranteed Companies.					***	
		-					
	III.—From Capital of Companies other than old Gyaranteed Companies.						
	Lines in Progress.						
	Bengal-Nagpur—						
7	Gondia-Chanda		223	109-39	3.33	41.61	25.20
8	Kampti-Ramtek		17	7.42		4.37	1.74
9	Nainpur-Mandla		32	11.55		1.17	5.00
0	Pench Valley		29	16.53	8.93	2.30	0.20
1	Purulia-Ranchi		72	39-83	2.66	21.43	10.50
2	Raipur-Vizianagram	$\cdot$	311	250 42		7:37	10-00
	Total			435-14	14-92	78:25	33-24
1	IV From Capital of Branch Line Companies wit	_ -					
	FIRM GUARANTES.			*			
	V FROM CAPITAL OF LOCAL BOARDS.						
	Lines in Progress.						
1	Bezwada-Masulipatam		50	22.93	4.00	9.50	600
	Total 1	-			-	14 61:10	0.50.00
	Total	**	***	•••		14,61.16	3,50.00

### APPENDIX 40-contd.

## Capital Expenditure on railways, 1907-1908—concld.

(Figures in lakhs and decimals of lakhs.)

				•								
io.	Bailway,									l	Distribution 1907-	of grants for 1908,
												<u> </u>
	ABSTRACT BY OPEN LINES  ACAPITAL FOR O				STRU	CTIC	ON.				Rs.	Rå.
	I. (i) State, by State agency										470-59	
	I. (ii) State, by agency of Companies	,									334 15	
	II. Old Guaranteed Companies					.•					27.10	
	III. Other Companies									.	181·10	
	IV. Branch Line Companies										0.30	*
					Тс	TAL	Оря	EN L	INES			10,13-2
•	BCapital for Lines in Pro	Q R	ESS	AND	New	Lin	ns.					,
	I. (i) State, by State Agency	•	•	•	•	•	•	•	•	:	169.01	
	I. (ii) State, by agency of Companies	,	•	•	•	•	•	•	•		108.51	
	II. Old Guaranteed Companies		•	•	•	•	•	•	•	. }	•••	
	III. Other Companies	•	•	•	•	•	•	•	•	•	53-24	
	IV. Branch Line Companies	•	•	•	•	•	•	•	•	.	•••	
	V. Local Boards	· 	•	D	•	•	•		•		6.00	
	Total Li	NES	IN	1,800							_	336.7
	A Demp A C'P CHOWING DICTE	r ron	ımı	OM 7				TO	ľAL		-	13,50.0
	ABSTRACT SHOWING DISTR	C			Lines		18.				470.59	
	(i) State, by State agency .	. {		-	tructio						169 01	
	I.—From Imperial	•	`				•	Tot	al (i)			<b>600.</b> 4
	Funds.	c	(a)	Open	Lines	٠.			(-)		334-15	639.6
	(ii) State, by agency of Companies	{		-	tıuctic						108-51	
		-	•					Tota	l (ii)			442.6
								Тот	AL I		-	10,82.2
		r	(a)	Open	Line	٠.					27:10	10,02 2
	II.—From Capital of old Guaranteed Companies		(3)	Cons	tructio	מ						4
	I.							Тотд	ı II			27·1
	III.—From Capital of Companies other than old	a <b>(</b>	(a)	Oper	<b>L</b> ine	в.					181-10	-, -
	Guaranteed Companies.	`{	(b)	Cons	tructio	מכ					53-24	
							•	l'ota:	LIII			234.3
*	IVFrom Capital of Branch Line Companie	٠,	(a)	Oper	Line	<b>s</b> .					0.30	-040
	with firm Guarantoe.	Έ			tructio							
	*							Тота	r IV			0.3
		(	(a)	Oper	Line	8 .						
	V.—From Capital of Local Boards	٠{	<b>(b)</b>	Cons	tructio	a					6.00	
	<b>4</b>							Тот	al V			6.0
		r	(a)	Oper	Line	٠.	•				10,13-24	
	TOTAL I TO V	.{	(8)	Cons	truoti	on.					336-76	•
	1					GR.	ANT	) TO	TĄL	,	18,50-00	18,50 (

# APPENDIX 40-contd.

# STATEMENT B.

Statement showing proposed lines which are under negotiation for construction by private Companies.

		1		
٧o.	NAME OF RAILWAY.	Length.	Fatimated ouet.	
-				
	Bombay-	Miles.	Rs.	
1	Dholka-Dhandhuka-Ranpur	<b>•</b> 58	Not stated.	
2	Idar Road to Bramhakhed	32	Do.	
3	Mirpur Khas-Jhudo	46	(a)	
	Bombay and Hyderubad (Nızam's)—		•	
4	Tadwale to Latur ,	37	Not stated.	
	·			
	Eastern Bengal and Assam-			
5	Mymonsingh via Netrokona to Bara-Ari, with branch from Shambhuganj to Gauripur	36	<b>22,16,</b> 000	
6	Singhjani vid Sherpur to Nali-	0.		
7	Sirajganj-Ullapara	25 18	12,39,000 11, <b>0</b> 0,000	
	Madras -			
8	Tinnevelly-Tiruchendur	38	20,53,000	
	· (%)			•
	Punjab-	.		
9				
	Rawalpindj-Murree, with extensions to Kuldana and Gharial	40	369,99,000	
i	Punjab and Rajputana-			
	Borawar-Hissar	186	33,07,790	

<sup>(</sup>a) £55,000 (or Rs. 8,25,000 at Rs. 15=£1) is provosed to be raised for the construction of this line.

APPENDIX 40—contd.
STATEMENT C.
Memorandum on the Construction of Railways.

Open lines on 1st April 1900.			
(Eastern Bengal	Miles. 497 95 )	Miles.	At the commencement of 1906-07, i.e., on the 1st April 1906, the total length of railways
(i) North Western Ondh and Bohilkhaud	(a) 8,268.85 } (b) 1,165.05 }	4,931.85	open for traffic was 28,611.07 miles, made up as
Agra-Dethi Chord (c)	125.81		follows:—
Bezwada Extension (d)  Bhough-Itarni (British section) (c)	20.84		5' 6" gauge— Miles. Miles.
(ii) East Indian	(e) 504-35 1,999-79	7,383.02	(i) State lines worked by the State . 4,931.85 (ii) State lines worked by companies . 7,363.02
Godbra-Rutlam-Nagda (f ) Great Indian Peningda Indian Midland (c)	141.14		(iii) Companies' lines guaranteed by Gov-
(mauras (North-East line) (g)	809.66 (A) 497.10 J		ernment under the old contracts . 904-01 (iv) Companies' lines guaranteed by Gov-
(iii) Madras (iv) Hardwar-Dehra (i)	7876	32.04 304.01	ernment under modern contracts . 32.04
(South Behar (1) Southern Punjah (k) (v) Southern Punjah (Ludhiana) Extension (k)	425:33 ( 154:50 (	814'07	(v) Branch line companies' railways assisted by Government under
	165-49)	162-36	"Robate" terms
(vi) A. Delhi-Umballa-Kalka (j) B. Torkessur (j) (Hhopal-Itarsi (Native State section) (c)	44·28)	22.23	(vi) Assisted companies' lines - Miles.
Bina-Googa-Baran (c)	113·27 145·63		A. Subsidized by the Gov- ernment of India . 162:36
Kolar Gold Fleida (g) (A. ( Nagda-Ujiain (f) )   Nizum's Guaranteed State	9.88 84.32	711:33	B. Receiving land only
(vii) Petlad Cambay (Anand Tarapur section) (f) Petlad Cambay (Tarapur-Cambay section) (f) (Jammu and Kashnur (Nature State section) (k)	330·14 21·50		from Government 22:23
(Jammu and Kashnit (Native State section) (k).  B. Ludhians Diuri-Jakhal (k)	79:86 15:94 18:81	201-69	(vii) Native State lines-
B. Ludhiann-Dhuri-Jakhal (k) Rajpura-Bhathula (4) (campore-Burhwal (Metre gange link)	107:06	)	A. Worked by companies 711.33  B. Worked by State rail-
Fastern Rengal-	(1) 12 00	İ	way agency . 201 69
Beher, Kaunia Dhubri and Northern sections (including the British section of the Santraburi extension and the Ranghat-Krehnngar and		} 852·33	913 02
Dages section	69.83 086 80	}	3' 3\frac{3}{2}" gauge— (viii) State lines worked by the State . 852:38
Assum-Bengal Beilary-Rayedrug (m)	775 28° 33°35	}	(ix) State lines worked by companies . 7,614:00
Burma Guntakal-Mysore frontier (m) Hospet-Kottur (m)	1,340 15 119 50 43:06	ł	(x) District Boards' lines
Judhpur-Hyderabad (British section) (n) Lucknow-Harcilly (o)	123 98 237 04	i	assisted by Government under
(iz) Mysore section (Southern Mahratta) (m)	200.32	7,614.00	"Robato" (erms 138-89
Palanpur-Deesa (f) Rajputana-Malwa (f)	17:28 (p) 1,782:34		(xii) Assisted companies lines—Miles.
South Indian Southern Mahantu	1,123.05 1,04.104	1	A. Subsidized by the Gov- ernment of Iudia . 109 92
Timevelly-Quiton (Travancore) (Brilish section) (q) . (1) Tanjore District Board (q)	613-20	,	B. Subsidized by Local
(Alimedabad-Paranti) (f) (xi) Ahmedabad-Paranti) (f)	38·50 54 70	30.46	Governments . 77:50 C. Subsidized by District
Mymensingh-Jamalpur-Jagannathganj (s) .  A. Rohllkund and Kumaon  B. Ditra-Sadiya	50.60	109-92	Boards 36 40
	***	77 50 36 40	D. Receiving land only from Government . 1,045:21
D. Bengal Dooars Extensions	923.86 116 50	1.045.21	1,269:03
(xiii) Ledo and Tikak Margherita (!) (Bhavnagar Gondal-Janagad-Porbandar	4 79	8.20	(xiii) Unassisted companies' lines
Bikaner Dharangsdra (c)	(4) 334 19° 245°35 20°88	ł	A. Worked by Native
A. ( Jannagar (v)		} 1,320·03	States 1,326·63 B. Worked by companies . 814·38
Jodhpur	403:80 (.r) 94:64		2,141.01
(xiv) (Birur-Shinogu (m) (Gackwar's Mehsana (f)	47:30	{	(xv) Lines in Foreign Territory 73.60
Hindapu (Yesvantpur-Mysore frontler) (m) Hydernbad-Godavari Vulley (d)	93.63 61.35	}	12,196·87*
Jaipur (f).   B.   Kullinpur (m).	391·13 33·16 29 27	ł	Special (2' 6' and 2' 0") gauges— (xvi) State lines worked by the State
Mysore-Nanjangud (m) . Shoraour-Cuchin (g) Timescily Quilon (Travancore) (Native State	15 80 64 75	1	(xvii) State lines worked by companies 401-25
Timescily Quilon (Travancore) (Native State	57 98	1	(xviii) Assisted companies' lines-
Western (q),			(2.11) ten meet companies into
Vijapur-Kalol-Kadk (f)	41·37 16·65	)	Miles.
(x) { Karaik kal-Pardin (q) (Yiapur-Kainl-Kadl (f) (Karaik kal-Pardin (q) (podicherry (q) (podicherry (q) (principue) (m) (podicherry (q) (principue) (m) (podich Light (q) (principue) (m) (principue	41:37 14:05 7:85 51:10	73-80	
(xv) { Karaik kal-Pardin (q) (xv) { Karaik kal-Pardin (q) (podicherry (q) (West of India Portuguesq (m) Dandot Light (2''0'') (4) (xvi) { Jorhat (2''0'') (xvi) { Khushaigarh is ohat-Thal (2''6'') (k)	41:37 14:65 7 85 51 10 6:18 80:25	78·80	Miles. A. Sub-idized by Local Governments . 58.76 B. Sub-idized by District
(xv) {Viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f)) {Karaik kai-Pardin (g) (viapur-kaini-kaik (g) (g) (g) (g) {Karaik kai-Pardin (g) (g) (g) {Kaini-	41:37 14:05 7 85 51 10 6:18 30:25 91 73 40:25	78·80	A. Subsidized by Local Governments . 5876 B. Subsidized by District Boards 12160
(xv) {Viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f)) {Karaik kai-Pardin (g) (viapur-kaini-kaik (g) (g) (g) (g) {Karaik kai-Pardin (g) (g) (g) {Kaini-	41:37 14:05 7 85 51 10 6:18 30:25 91 79 40:25 24:06 50:44 18:14	73-80	A. Subsidized by Local Governments
(xv) {Viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f) (viapur-Kaini-Kadk(f)) {Karaik kai-Pardin (g) (viapur-kaini-kaik (g) (g) (g) (g) {Karaik kai-Pardin (g) (g) (g) {Kaini-	41:37 14:05 7:85 51:10 6:18 30:25 91:73 46:25 245:05 60:44 18:14 60:34	73-80	A. Subsidized by Local Governments
(xv) Karaik kal-Pardin (y)  (xv) Karaik kal-Pardin (y)  (va) Gondichery (a)  (va) Gondichery	41:37 14:05 7:85 51:10 6:18 30:25 91:73 40:25 245:05 50:44 18:14 50:31 25:38 51:00 7-76	73-80	A. Subsidized by Local Governments . 58.76  B. Subsidized by District Boards . 121.60  C. Receiving land only from Government . 67.43  (xix) Unassisted companies' lines . 33.27
(xv) Karaik kal-Pardin (y)  (xv) Karaik kal-Pardin (y)  (va) Gondichery (a)  (va) Gondichery	41:37 14:05 7 85 51 10 6:18 30:25 911 73 40:25 248:05 50:44 18:14 60:31 25:38 61:00 7-76 28:00 18:50	73-80 168-41 404-25	A. Subsidized by Local Governments . 58.76  B. Subsidized by District Boards . 121.60  C. Receiving land only from Government . 67.43  (xix) Unassisted companies' lines . 33.27  (xx) Native State lines
(xv) Karaik kal-Pardin (y)  (xv) Karaik kal-Pardin (y)  (va) Gondichery (a)  (va) Gondichery	41:37 14:05 7 68:26 7 7 68:26 9:19 8:19 9:19 9:17 9:40 25:38 61:00 7 7:70 28:00 37:11 19 7:20 20:18	73·80 168·41 404·25 58·76	A. Sub-idized by Local Governments
(xv) Karaik kal-Pardin (y)  (xv) Karaik kal-Pardin (y)  (va) Gondichery (a)  (va) Gondichery	41:77 14:05 7 66:76	73-80 168-41 404 26 58-76 121-60	A. Subsidized by Local Governments
(xv) Karaik kal-Pardin (y)  (xv) Karaik kal-Pardin (y)  (va) Gondichery (a)  (va) Gondichery	41:77 14:05 7 68:26 7 7 68:26 7 7 68:26 7 7 69:26 7 7 69:26 7 7 7 7 69:26 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	73-80 168-41 404-25 121-60 07-43 33-27 11-96	A. Sub-idized by Local Governments
(xv) [Sacton (q)]  { Karaik kal-Pardin (q) }  { Karaik kal-Pardin (q) }  { West of I nila Fortiqueso (m) }    Dandot Light (2' 0") (4) }  { (xv) [Dandot Light (2' 0") (4) }    Aubalgari's Kohnt-Thal (2' 6") (k) }    Nowshiera-Durgu (2' 6") (k) }    Aubholpor-Onder Estensiou (2' 0") (q) }    (xvii) { Morajur-Dharanapur! (2' 6") (g) }    Rajur-Dharanapur! (2' 6") (g) }    Tiripattur-Krishnagil (3' 0") (g) }    A { Thaton-Duyurasik (2' 6") }    Barracil Light (2' 0")	41:37 14:05 7 66:05 7 66:05 80:25 80	73-80 168-41 404-25 404-25 121-60 3-31-27 11-96	A. Sub-idized by Local Governments
(xv) [Sacton (q)]  { Karaik kal-Pardin (q) }  { Karaik kal-Pardin (q) }  { West of I nila Fortiqueso (m) }    Dandot Light (2' 0") (4) }  { (xv) [Dandot Light (2' 0") (4) }    Aubalgari's Kohnt-Thal (2' 6") (k) }    Nowshiera-Durgu (2' 6") (k) }    Aubholpor-Onder Estensiou (2' 0") (q) }    (xvii) { Morajur-Dharanapur! (2' 6") (g) }    Rajur-Dharanapur! (2' 6") (g) }    Tiripattur-Krishnagil (3' 0") (g) }    A { Thaton-Duyurasik (2' 6") }    Barracil Light (2' 0")	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 50:44 18:14 60:11 25:18 61:06 7 7:72 28:00 28:00 39:50	73-80 168-41 404-25 121-60 31-27 11-96 31-37 3-72-42 3-72-42 3-72-42 3-72-42	A. Sub-idized by Local Governments
(xv) (Karaik kai-Pardin   (g) (Viapur-Kaini-Kadi (f) (Karaik kai-Pardin   (g) (Viapur-Kaini-Kadi (f) (Karaik kai-Pardin   (g) (w) (west of folial fortingueso (m) (Mandot Light (2' w') (4) (Mandot Ligh	41:77 14:05 7 68:26 7 7 68:26 7 7 68:26 7 7 69:26 7 7 7 69:26 7 7 7 7 69:26 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	73-80 168-41 404-25 121-60 31-27 11-96 31-37 3-72-42 3-72-42 3-72-42 3-72-42	A. Sub-idized by Local Governments
(xv)   Section (q)   (xv)    (xv)   Karatikal-Pardin (q)    (position (q)   (position (q)    (xv)   Condictor (position (q)    (xv)   Condicto	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) Karaik kal-Pardin vg)  (xv) Karaik kal-Pardin vg)  (xv) Karaik kal-Pardin vg)  (xv) Wandichard Pardin vg)  (xvi) Wandichard Pardin vg)  (xvi) Kanaik (xvi) (xvi) (xvi)  (xvi) Khushalgarlı Kohat-Thai (xvi) (xvi)  (xvi) Khushalgarlı Kohat-Thai (xvi) (xvi)  (xvi) Kalka-Binil xvi' (xvi) (xvi)  (xvi) Morapur-Dharmapuri (xvi') (yvi)  (xvi) Kalka-Binil xvi' (xvi') (yvi)  (xvi) Kalka-Binil xvi' (xvi') (yvi')  (xvi) Kalka-Binil xvi' (xvi') (yvi')  (xvii) Kalka-Binil xvi' (xvi') (yvi')  (xvii) Haras-Light (xvi') (xvi')  (xvii) Haras-Light (xvi') (xvi')  (xviii) Kalka-Binil xvi' (xvi')  (xviii) Kalka-Binil xvi' (xvi')  (xviii) Capardin xvi' (xvi')  (xviii) Capardin xvi' (xvi')  (xviii) Capardin xvi' (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin xvi' (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi') (xvi')  (xvi') Capardin (xvi') (xvi') (xvi') (xvi') (xvi')  (xvi') Capardin (xvi')	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) Karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (karaik (z''u'') (y)  (karaik (z''u'') (z''u'') (z''')  (karaik (z''u'') (z''') (z''') (z''')  (karaik (z''u'') (z'''') (z'''') (z'''')  (karaik (z''u''') (z''''') (z''''') (z''''')  (karaik (z''''''''''''''''''''''''''''''''''''	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) Karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (karaik (z''u'') (y)  (karaik (z''u'') (z''u'') (z''')  (karaik (z''u'') (z''') (z''') (z''')  (karaik (z''u'') (z'''') (z'''') (z'''')  (karaik (z''u''') (z''''') (z''''') (z''''')  (karaik (z''''''''''''''''''''''''''''''''''''	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) Karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (bandet Light (2''u'') (4)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (karaik kal-Pardin (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (kal-Simia (z''u'') (y)  (karaik (z''u'') (y)  (karaik (z''u'') (z''u'') (z''')  (karaik (z''u'') (z''') (z''') (z''')  (karaik (z''u'') (z'''') (z'''') (z'''')  (karaik (z''u''') (z''''') (z''''') (z''''')  (karaik (z''''''''''''''''''''''''''''''''''''	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) { Karain Kali-Kadi (f) (xv) { Karain Kali-Kadi-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Karain Kali-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Condicher (part) Fortugueso (m) } } } } } }	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) { Karain Kali-Kadi (f) (xv) { Karain Kali-Kadi-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Karain Kali-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Condicher (part) Fortugueso (m) } } } } } }	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv)   Section (q)   (xv)    (xv)   Karatikal-Pardin (q)    (position (q)   (position (q)    (xv)   Condictor (position (q)    (xv)   Condicto	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-idized by Local Governments
(xv) { Karain Kali-Kadi (f) (xv) { Karain Kali-Kadi-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Karain Kali-Kadi (f) (xv) { Condicher (part) Fortugueso (m) } } } } } } (xv) { Condicher (part) Fortugueso (m) } } } } } }	41:77 14:05 7 66:05 7 66:05 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:12 80:13 80	73-80 168-41 404-25 121-60 33-27 11-86 31 37-242 7 33-60	A. Sub-sidized by Local Governments

### APPENDIX 40-contd.

And the mileage under constru	netion	07 sano-		Lines under construction and sanctioned on Sist March 1906.	, .
tioned for construction on the sa	me da	te, was	,	Eastern Bengal-	dilor.
3,304.98 miles, as follows:—				Kakurgschi Chord 2:28 Laigola to Laigola Ghât 2:78 11:00 Panchooria to the Ganges river (a) 6:00	
	Miles.	Miles.		Nagda-Muttra 40'00 383'99 Nogda to Muttra 883'98 383'99	
			(1) {	North Western- Kacha Garhi to mile 23	630.66
5' 6" gauge-				Bargoda to Shorkot Boad	
(i) State lines worked by the State .	690 56			Oudh and Rohllkhand— Fhaphawau to Zafarabad.  [ Azhikal-Mangelore	57·50 97·27
(ii) State lines worked by companies .	916-23			Bougai-Nagpur— Bhojudh to Hariharpur	
(iii) Branch line companies' railways				Branch line near Kanoodih 1.97 Viziahagram to Ruipur 310-33 East Indian— Agra direct access 175	
assisted by Government under "Rebate" terms	26.85			Burharwa to Katwa 99-14 Bhagalpur to Bausi 31-04 Borachuk to Sodepur 4-50	
		1,633.63		Chord into between the East Indian and Oudh and Rohilkhaud State railways near Moghal Strai	
	_		(ii)	Chât line to Phulian. 106   Ghât line to Sajimpara 2.50   416.11	916.33
	•9			Hooghly to Katwa. 65:20 Khurja to Hapur . 38:87 Manpur to Dhanbaid 131:49	
				Mile 1701 from Howrah on the Jharia branch to Chandore	•
				Nagri to Kasunda	
				Kurla to Mazagaon	
				Warora to Bellarpur. 37-89) Madras (North-East line)— Korukkuppettal to Basin Bridge . 0-85	
			(111)	(Salem-Attur (b)	26.85
				1	
		•	(iv)	Eastern Bengal Forberganj to the Nepal Frontier 6'80	
21.220				Kathar to Godagari Kokrahar to the Brahmaputra river opposite Gaulati	227:37
3' 3\frac{1}{3}" gauge—				Absam Bengal 19:00 35:00 35:00	
(iv) State lines worked by the State	227 3			Kalaura to the Khooseara river 16'00 5	
(v) State lines worked by companies .	425.38			Thamaing to Malagaon 6-70 Burma Extensions –	
(vi) District Boards' lines	49.50		<b>(v</b> )	Nilgiri - Coongor to Octaesmund	425-38
(vii) Assisted companies' lines-				South Indian -   Maudapan to Baneswaram Temple   1013   Tangachmadam to Port Ampthill   171   20-83   Truppachettai to Sivagauga   900	
Miles.				Tirboot— Balragula-Narkatisganj	
A. Subsidized by the Government of India . 92 CO				Bhagalpur Kachery to Bhagalpur . 0.79   Mansi to Bhaptanii . 00.57   164 42   Narkatiagani to Bagaha . 36 00	
B. Subsidized by local Governments 8.50			(vi)	Saharsa to Muriiganj	4.20
C. Receiving land only from Government . 95.23				A. Rohilkund and Kumaon— Lalkua to Kashipur	92.00
Description white	195.73		(vii)	B. Dibru-Sadiya— Talap to Salkhoa Ghat	8-50
(viii) Native State lines worked by com-	82.78	On.		C. Bongal and North-Western— Dharonda to Maharajgan 390 Gamani to Jarwa 3250	
-		980.76		Gorakhpur to Bagaha 60°94	95-23
				Chankama to Bechraji	
			(viii)	Manual Road to Harij 21.37	82·78
				Sangli-   Miraj to Sangli Town	
Special (2' 6" and 2' 0") gauges-				•	
(ix) State lines worked by the State (x) State lines worked by companies .	6·80 329·66				
(xi) Assisted companies' lines -	528 00		(ia)	Juliundur Kapurthala-Sultanpur (British section) (c)-	6:80
Miles. A. Subsidized by District				Juliundur to the British Frontier [Gondia-Chanda (2" 2")— [condia-Chanda Care 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.00
Boards 12.50 B. Receiving land only			(x)	Pauni (Brahmspuri) to Nagpur 63 75)  Jubbulpore-Gondia Extension (2' 6")	000.00
from Government . 208-32	800.00		(-)	Khirsadoh to Burkuhi	329-66
(xii) Native State lines-	220.82	•		Purulia-Ranchi (2' 6")  (A. Howrsh-Amta Light (2' 0")—	
A. Worked by Native States 44.63				Autpur to Champudanga (b)	18-50
B. Worked by companies . 66 66 C. Worked by State rail-			(zl)	Kuslamb to Tadwale 20 96 51 03	•
way agency 22:02	100.01			Dwarn-Therria Light (2' 6")— Dwarn to Maclong (d)  13:50	
-	138.81	690.59		Mathorau (2 0")-	208-32
· To	TAL .	3,304.98		Shahdara (Delhi)-Saharanpur Light (2' 6")— Baraut to Meerut	
		-		(Shahdara to Sanaranpur Cutch (2' 6")— A niar to Rhui	44.63
There was thus a grand total of pleted and in hand, on the 1st			(Tii)	Dholpur-Barl (2' 6")	
miles		1,916.05		Babalgarh to Shiupur C. Juliundur-Kapurthala-Sultanpur (Notive State section)— Sultanpur to the British Frontier (s)	92·03
		_,,		Odisanher to the Street Street (1) . 40	**

<sup>(</sup>a) Constructed but not worked.
(b) Commencement of work not authorised.
(c) Commencement of work not authorised.
(d) Completion deferred.

### APPENDIX 40-contd.

		API	ENI	IX 4	0—contd.	
	New Lines authorized.	Mules,	Miles.	Miles.	During 1906-1907, i.e., from 1st Apriticate 31st March 1907, 520:20 miles railway have been authorized as follows:-	of new
(i		180·80 } ,50 60 }	190.40	- 278·88	Tonway Mayo been authorized as follows:	7
	Balaman to Sitapur	37·12 } 51·38 }	89·49 J			
	Bengal-Nagpur— Kamptee to Ramtek Kandri branch	14·74 2·63}	61.27		, 5' 6" gauge— Miles,  (i) State lines worked by the State . 278.88	Miles
(11)	Sint to Gurunaishini East Indian— Toposi to Buraboni	43.00}	9:31	70.58	(ii) State lines worked by companies . 70.58	
			• • • •	′		349-46
					3' 3 <b>3"</b> gauge—	
	(Burma-				(iii) State lines worked by companies . 103.21	
(111)	Neikhen to Begayet Hospet-Kottur— Bannandrug Junction to Bamanamalai		4*98	108 21	(iv) Assisted companies' lines receiving land only from Government . 59.80	
	Kurncol Boad-Kurnool		32.00 )		(v) Native State lines worked by com- panies 7.73	
(14)	Bougal and North-Western- Burhwal to Situpur		٠.	59.80		170-74
(₹)	Gackwar's Mehsana— Kheraiu to Dabhora			7 73	Total .	520 20
	t					
		c				
	Lines opened or likely to be open	ed.				
	Castern Bengal-   Kaknrgachl Chord		2.75		And 951.84 miles have been, or are li be, opened to public traffic as follows:—	kel <b>y to</b>
(47)	Shahdara to Sangla Shorket Read to Sargeda Oudh and Rohllkhand—	103-14	168.64	219:07	o, openou to pusho tramo as follows .—	
	Azhikal-Mangalore	· · ·	*83 (K)		5' 6" gange—	
	Blogal-Nagpur-Bhojudib to Gomob (Haribarpur) Branch line near Khanoodib	25:84 1:97	27.01			Miles.
(rii)	Khurja to Hapur	37'87 122 17 1 50	207-59	350-91	(7i) State lines worked by the State . 219.07 (vii) State lines worked by companies , 350.91	
	Ondal to Sainthia Great Indian Peninsula— Warora to Beharpur	•41-06)	37-59		(viii) Branch line companies' railways	
	Madras (North East line) Korrukkuppetiai to Basin Bridge		Can		assisted by Government under "Rebate" terms	ı
(vi!i)	Amritsar-Putti			*27*49		597· <b>47</b>
	(Hospet Kottur-				3' 3}" gauge—	
	Ramandrug Junction to Bamanamalat  South Indian — Pawban beach to Rameswaram		6:95		(ix) State lines worked by companies . 174.56	
(i1)	Tithoot— Bairagnia to Narkatinganj	58 05 60 37 }	162.65	171 66	(x) District Board's lines , 3 90	
	Narkatiaganj to Bagaha Saharsa to Murbganj	18.61	13.35		(xi) Branch line companies railways assisted by Government under "Rebate" terms 2:53	
(1)	Tardore District Board.— Arantang: Quarry Branch (a)			3.80	(xii) Assisted companies' lines receiving	1
(zi)	Mymensingh-Jamalpur Jagannathganj-				land only from Government . 9214	
	New line laid at Jagannathganj (a)			2.53	(xiii) Native State lines worked by com- panies	277-57
( <b>z</b> ii) (	Bengal and North-Western— Diaronda to Maharajganj Gainsari to Jarwa Gorahhpur to Hagaba	: : :	9 47 60 94	92'14		211 07
	Savan to Thawe	: : :	17:83)			
(xili)	Sangli Miraj to Sangli	<b>.</b>		*4:44	Special (2' 6" and 2' 0") gauges—	
	1				(xiv) State lines worked by companies . 13:62	
	Jubbulpur-Gondia Extension (2' 6")—	6.661.3			(xv) Assisted companies' lines receiving land only from Government . 63:18	
(xiv)	Khirsadoh to Barkuhi Khirsadoh to Sirgora Rajpur-Dhamtari (2'6") Kajim to Bajim Towa (a)	7.70}	0.78	13.63	,	76.80
			· · · ·		<b></b>	051.51
(27)	Barsi Light (2' 6")— Barsi Road Junction to Pandharpur Kuslamb to Tadwale Matheran (2' 0")	*30*31 }	50·57 •12·61	63-18	Total .	951-84

Correction of mileage.
 (a) These lines are not shown as under construction at the beginning of the year as no intimation was received of their being under construction.

APPENDI	IX 40—contd.	
The total length of open line at the commence-	Open lines on 1st April 1907.	Milon, Milos
ent of 1907-1908, i.e., on the 1st April 1907	(Bastern Renga) (i) North Wostern	(a) 3.427-40 \$ 6.186-90
ll, therefore, be 29,571.32† miles, comprising	Coudh and Bobilkhand	(a) 1,229 28 5 126 90 7
6" gauge- Miles. Miles.	Axbikul-Mangaiore (d) Bengal-Nogaur Bezwah extension (e) Bhopal-Itarsi (British Section) (e)	* 1,7%3 63 20 58
(i) State lines worked by the State 5.150.92 (ii) State lines worked by companies . 7,720.15	Bhopat-Itansi (British Section) (c) (ii)   Homb.ry, Barods and Central India   Kost Indian	13:11
(iii) Companies' lines gineranteed by Government under the old con-	Great Indian Peniusula	2,200 90 1 141 14 1,800 22
tracts 904:01 (iv) Companies' lines guaranteed by	Indian Midland (et   Madras (North-East line) (d)	(A) 498'04
Government under modern con- tracts	(iv) Hardwar-beling (i)	904:01 52:04:
(v) Branch line companies' railways	(Amitticar-Pitti ()) (South Behar (k) (v) (Southern Punjab (j)) [8 mithern Punjab (Ludhiana) Extonsion (j) (Tanil Vulley (g)	78-76   42-733 > 843-11 -145-05
assisted by Government under "Robate" terms	(Sinthern Punjab (Ludhiana) Extension (j) UTapil Vulley (g) (vi) {A. Delta-Umballa-Kaika (k) (Fi) {B. Tarkessur (k) (Though Units) (Vidina State Scatters)(s)	186·49 J
(vi) Assisted companies' lines-	Bhopal-Upain (c)	44°28 ) 113°27 }
A. Subsidized by the Gov-	Bina-Goone-Baran (e) K Ohr ald-decids (d) A. Angda-Ulain (g) Nizun's Guaranteed State	9 89 013.00
ernment of India . 102 36  B. Receiving land only	(vii) {   Niz inn's Gueranteed State   Petlad Cambay (Anand-Tarapur section (g)   Petlad-Cambay (Lorapur-Cambay section) (g)	21-00 E
from Government . 22 23	( Jania and Kanmir (Maties Brate section) ())	* 12 x0.j 16 95 y
(vii) Native State lines—	(Cawapore Buthwal (Metre gauge tent)	78 66 } 201.69 107.06 }
A. Worked by companies 711'32  B. Worked by State rail-	Eastern Bengal  Robar, Kaunia Donbri and Northern section (vii) turifully the Bertish section of the Sasteabari extension and the Ranaghat Krishnagar and	
way agency 201:60	1 cana a nongram oran-nee	+ 687·42
38" gauge— 15,746.83	Docor section  Assam Bongal  Rethry-Rayadrug (m)	85-92) 775-26 ) 93-86 f
(viii) State lines worked by the State . 852.94 (ix) State lines worked by companies . 7,781.52	Burum	1,340 16 110 50
(x) D'strict Boards' lines 103 36 (x) Branch line companies' railway	Ho pet-Kottur (m) Lodipur-ify & rabad British section (n) Lucknow-line city to)	48 02 1 128 98 1 237 04
assisted by Government under	(ix) Syone section (Southern Mahratta) (a) Niger( (d)   ralenper-Do. so (q)	296 23 7,781*68 10 99 17 78
(xii) Assisted companies' lines-	Rajpatana-Malwa (g) . South Indian	(p) 1,774 36 1,13 : 00
Miles. A. Subsidized by the Gov-	Fortiern Mahratta Tunievilly-Quilou (Travaneore) (British section) (g)	1,048 04 69 46 *770 63
ernment of India · . 117·87 B. Subsidized by local	(4) Tanford bistrict Board 'q) (A) Tanford bistrict Board 'q) (A) (2) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	33.50)
Governments 77:50 C. Sabsidized by District	(xi) Ahamdabad Paranti (a)  (Manuershigh Jamalpur Jagannathgani (a)  (A) Rohilzund and Kumaon	5.5'24) 141'43 117 87
Boards 36:40	(xi) Dibru-Sadiya C. B. ngai-boars  (xii) Bengal boars Extensions	*1,016:07 }
D. Receiving land only from Government 1,137'42		116 56 4 70
(xiii) Unassisted companies' lines . 850	(alii) Ledon d Tikak-Margherita (f. Bh. vongar-bondal-Jumgad-Porbundar   Bikanor	(a) 334 10 1 247 36 1
(xiv) Nativo State lines-	Disaugadra (v)	20 63 (w) 81:23
A. Worked by Native	A. Johnsen-Rajkot (v) Johnpar Motvi	4631 7 1,049 05 453.7 7 (a) 96 64
States . 1,326.63 B. Worked by companies 818.82	t Ud tipur Chitor	67:90 J 37 F3 )
(xv) Lines in Foreign Territory 73.60	(xiv) { Gackwar's Alcheana (g)   Hindupur (Yesr intpur-Myscre frontier) (m)   Hydranad-sodavari Valley (s).	92 63 51 95 391-13
rcial (2' 6" und 2' 0") gauges.	Jainu (q) .   Kolhabur (m)	12 18 29 27 ( 29 27 ( 15 90 ) 618 82
(xvi) State lines worked by the State . 227.85" (xvi) State lines worked by companies . 358.74	Shoranur-Cechiu (di	4 41 04 75
(xviii) Assisted companies' lines — Miles.	Time velly-Quilen Travancore) Nation State vector) (1) Vijagne-Kuid-Kadl (g)	57:98 41 37
A. Subsidized by Local	(xv) {Raratkel Petalam (q)   Onlichery (q)   Went of India Portuguese (m)   (xv	7 75 73'60
Governments . 58-76 B. Subsidized by District	(We at of India Portuguese (ml.) (D. ad t Light (2'0", (f)) 1 Jorint (2'0") (xvi) { Kelkas'amin (2'0") (j) (boolsheath Kohat-Ibal (2'0") (f).	51 10 ) 6 18 ) 30 25 [
* Boards 121 60 C. Receiving land only	(xvi) { Kelka-Sunba (2'6") (j) Khu-halgath-Kohat-Thal (2' 6") (j).	F9 45 } 227 85 9. 73 ]
from Government . 130 61 310 97	(Jubbaly actiondia Extension (2'0") (y)	40 21 j 257 80 j a)
(xix) Unassisted companies' lines . 33°27 (xx) Native State lines—	(xvii) { Marapour Dharmanori (2' 1") (d)   Raipur-Dhamfari (-' 6") (v)   The most tork via nairi (2' 4") (A)	*18 53 } 958*74 *56 94 { 26 39 }
Miles.  A. Worked by Native	Katka Suda (2' 1'')     Katka Suda (2' 1'')     Kaij M karpur Dhamter (*, '0'' (v) '')     Hapur Dhamter (*, '0'' (v) '')     Tu npattur-Krishaarin (2' 0'')     A Guri reding Himadaya (2'')     Thatom-Bajthar Light (2''')	7 76 } 58:76
States 11 67	(Baragot-Basirhat Light (2' 6") (Bukhtkarpur-Behar Light (2' 6") (xviii) { B. { Howard-Anta Light (2' 6") Howard-Sheakhala Light (2' 0")	26 · 0 ) 18 60   37 · 19 } 121 · 60
C. Worked by State rail-		19 75 j 20·10)
way agency 33 60 417 68	(Harel Light (2' 0")  C. Matherau (2' 0") (4)  Powayan Light (2' 0") (9)	39 20 ) 15 41 26.20 } 130.61
	(xix) Tarakeshwar-lingra Light (2.6)	33 27 *94:49 \
TOTAL . +29,571-32	(xx) B. Mourbham (2' (") (")	32 41 } 372'41
	(xx) { B. { Monthlam (2' 0'') (y) } } Partial kinet (1' a' 6'') (y) . [Bi)piph (2' 0'') (0)	21:62   37:37   33:60
See loobnote (a) on page 288.	was true by the Robitkhand and Kumaon Railway Compan	
See fonb-note (8) on page 285.  Worked by the Standard Reintsula Railway Company.  Worked by the Stadros Railway Company.  Worked by the Stadros Railway Company.  Worked by the Stadros Railway Longaranteed State Railways Company.  Includes 39 38 miles of 3 38 gauge line between Virangem and Wadhwan.  Worked by the Bombay, Baroda and Central India Italiway Company.  See fuod-note (3) on page 308 kikhand State railway.  Worked by the Yorth Western State railway.	(r) See foot-note (p) on page 259. (c) Worked by the Senth Indian Railway Company. (r) Worked by the Bongel and North-Western Railway Competed by the Raylern Rongel State railway	iny.
Worked by His Highness the Niam's Guaranteed State Bailways Company, Includes 39 28 miles of 3' 38" gauge line between Virangam and Wadhwan, Worked by the Bombay, Baroda and Central India Railway Company.	(r) Worked by the Bongol and North-Neston Raiway Compile.  (b) Worked by the Eastern Bengol State rail say.  (f) Worked by the Assam Railways and Trading Company.  (a) Includes 5 23 mire of Bhavangar-Dock estates and Junes.	nd quarry lines.
See toot-note (a) on page 258 Worked by the Outh and Robilkhand State rallway.	(a) Worked by 100 little of the field Bandar Dock cutate lines.	naj. and Warsi
	(y) Worked by the Rengal-Nagpur Bailway Company.	nistration for working
Worked by the East Indian Kallway Company.  See foot-note (!) on page 258  Worked by the Southern Mahratta Railway Company.  Worked by the Jodhpur Bikaner railway Correction of mileage.  **Correction of mileage.**  **Auda na a follows ***  ***  ***  ***  ***  **  **  **  *	from the lat January 1807.	
Onen of the commencement of 1968-07	28,611:07	
Opened during 1908-1907	951:84 29,502:91	

# Appendix 40-contd.

	Lines under construction and say		Miles.	Miles.	Miles.	And the mileage under construction or sa tioned for construction on the 31st March 18 will be 2,873:17 miles, made up as follows:—	
	Lalgola to Lalgola tibat Panchooria to the Gauges rive Nagda-Muttra—	r (a) .	8 00 }	8 75		Will by 2,070 17 miles, made up as 10110 ws	
	Kotah to Baran	: : :	40'00) 543'18)	393.08		Miles. Miles. Miles.	
(i) +	Kacha Garhi to mile 23 Khushalgarh bridge and appr	onches .	23 00 ) 3 63 1	}	754.83		)5.
	Lodhrau to Khanewal Shorkot Road to Chichoki Thal to Parachunar	: : :	. ŭ6*5∌} . 130 ko ∤ . 19 .o J	273.62		5' 6" gauge  (i) State lines worked by the	
j	Oudh and Robilkhand—	• • •	37 12)			State	
	Rosa to Sitapur		81°3∪ }	811 41)		(ii) State lines worked by com-	
	Kumptes to Ramlek Kandri branch Sint to Gurumaichini	: : :	14.74 ) 2.53 ( 41°00 (	3/1/80]	•	panies	J·46
	Vizianagram to Baipur East Indian—	· · ·	310 (62 )	1			
	Burbarwa to Kotwa Bingalpur to Bausi	: : :	31 0 + 1 31 0 + 1			3' 3\frac{3}{2}" gauge	
, Ì	Bornehuk to Sodepur Chord lips between the East Ouds and Robilkhand St	Indian and	4 60 1	1		(iii) State lines worked by the State	
." Ì	near Moghal Sarai Ghat line to Dhulian	mo ranways	1 19 5	2:0:35 }	C35163	(iv) State lines worked by com-	
	Gliat line to Sejimpara Hooghly to Katwa Milo 1707 from Howrah on	iba ilmai	65 20 }	- 1		panies	
	biqueh in Chandors Toposi to Baraboul	tue Juana	4 16 9 31	i		(v) District Boards' lines 49.47	
	Kurla to Mazagaca		6 51 2	7:81		(vi) Assisted companies' lines-	
	Mahim link Salem-Attur (b)  Eagtorn Bengal—		1 32 5	30-06		A. Subsidized by the Government of India 84 12	
,-1/	Forbesganj to the Nepal Fronti Kambur to Godagari			103 00	227:37	B. Subsidized by Local Governments . 8:50	
,	Kokrajhar to the Brahmsputtra (Assam-Bengel	river of bo-it	e Ganhati •	115'57 )		C. Receiving land only	
Ì	Akhaura to Ashaganj Kalaura to the Khooseara rive	.: : :	10 00 }	25.00		from Government . 59:80	
Ì	Burma Neikban to Begayet Thanning to walngaon	. : :	66'25 }	72 95		(vii) Native State lines worked by companies 86.49	
	Burma Extensions— Henzada to Kyangm		651167	180 93			9.0
") {	Kurneel Road-Kurneel	: : :	121 27 5	33.00 }	353*30	Special (2' 6" and 2' 0") gauges-	
	Cooncor to Octacamund .	• • •		*11:75			
	Portion of the Rameswaram ex Tanguchimadam to Port Aunt Tiruppochetiai to Sivagunga	hill	1:13	1,388		(vi.i) State lines worked by the State 6.80	
- (	Tirhoot— Bhaga'pur Kachery to Bhagalp	ar .		0'70		(ix) State line worked by com-	
(∀)	Bezwada-Musulipatam	· · ·			•49 47	panies . ,	
í	A, Robilkund and Kamaon— Lalkan ta Kashipur			*36 43 (	84,13	(x) Assisted companies' lines-	
vi) {	Moradabad to Kamnagar B. Dibru-Sadia— Talap to Saikhoa Ghat			•17 d9 §	8:50	A. Subsidized by District Boards 12:00	
- {	C. Bengal and North-Western-	• • •			<b>89</b> 80		
ſ	Chackwar's Mehsana Chansana to Bechroji		16 713			B. Receiving land only from Government . 144:50	
(II) {	Khi ralu to Dabbora Manual Rand to Harij		7 73 21 37	15:81	86 19	157.00	
į	Jalpur Nawai to Siwai Madhopur .			•10.62)	00.10	(xi) Native State lines—	
111)	Julius dur Kopusth de Sultunpur (Brets	th scetion) (c)				A. Worked by Native States 44:63	
,	Juliandar to the British front Gondar Chanda (2'6")-	ier		• •	68)		
ix)	Goudia to Chanda (b)	· (/) : :	149'85 ) 63'75 }	212.40		B. Worked by companies . 66:39 C. Worked by State rail-	
1	Jabbalpore-Condia Extension (2' 6") — Nampur to Mandla Paulia-Bauchi (2' 6")			32 14	310.83	way agency 22.02	
	(A Howrsh-Amts Light (2'0")		• •	72·2H]		155 04 61	3.8
- 1	Autuur to Champadanga (b)	: : :	: :	9°00 ( 3 50 )	12.50	TOTAL . 2,87	3.1
(E) {	t i z Dama to Maulong (d)		13 50 7	10 50 }		Making a grand total of railways comple	
į	Paraut to Meerut	ght (2° 6″)—	guino i guine	125 00	144.20	and in hand, at the commencement of 1907-19	
	C Shahdara to Saharanpur .		93 (a) <u>j</u>	,		of miles	
í	A. {C. (ch (2' 6") - Anjar to Bhuj Chopper-Bare (2' 6")			25 38 7 10-25 5	44.63	And showing, after allowing for lines abandor	164
- 1	( B. Gaahor Light (2' 0")-	ا الماسية			*66:39	and corrections of mileage, an advance on	h
	C. Jullandar-Koppethala-Sulfanpur (I Sultanpur to the British From	tier (s)	crion) —		22 02	previous year of miles 528	4.
	(a) Constructed but not worked. (b) t commencement of work not anti- (c) Commencement of work not auti	norized. Novized and o	nestion of	gauge not	finally set	(d) Completion deferred. * Correction of mileage.	
	(a) Commencement of work not aud	Comp	ietea ana i	in hand at	the negiti	Miles. ning of 1900-07 21,016 05 520 20	
		.1dd		_		99 498485	
		Khus	halgarh lu	eidded .		yal-Nagpur railway North-Western State	
				dierto escia			
						89,440-77	
		Daduet				ngal-Nagpur railway	

### Appendix 40-concld.

It is expected that the following			- 1	astern Bongal Laigola to Laigola Ghat Vagda-Muttra	Miles.	Miles.	Miles.
infinished line will be opened for 1907-1908:—	or public tra	meth	(i) ?	Nagda to Kotah		136-80	164'88
s' 6" gauges—	Miles.	Miles.	(B	lengal Nagpur —  Kamptee to Ramtek  Kandri bruich	. 1474)	17:27	
(i) State lines worked by the			(ii) { 1	East Indian-		1.75	36.85
State	144.88		je	ireat Indian Pentusula— Kurin to Mazagaon	. 6'57 }	1	
(ii) State lines worked by com-	26.85	•	(	Mahim link	1.32 5	7'83 }	
		171.73	<i>a</i> ∫¹	Sastern Bengal-			
3' 3 gauge			<u>,(iii)</u> {	Forbeaganj to the Nepal Frontier Kovajime to Bijni	: :	8 50 }	36 00
(iii) State lines worked by the	36.00		1	Ashaura to Ashugani		19'60]	
(iv) State lines worked by com-			(iv) } 1	Burma Extensions— Henzada to Kyangin Pegu to Martaban	. 65.60 } . 121-27 }	186 93 }	217'69
panies	217.68		11	Silgiri-Coonoor to Ootacamund		11.75	
(v) District Boards' lines	4547			Bezwada-Masullpatam			49*67
(vi) Assisted companies' lines sub- sidized by the Government of	5.10		(vi) {¹	lohikund and Kumaon— Laikua to Kashipur		86:43 }	84-12
India	84·12		ζ.	Moradabad to Sammagar		47 69 5	
(vii) Native State lines worked by companies	86.49		(vii) {	Chansama to Bechraft Keralu to Dubbora	16.74	> 4584 <b>7</b>	
•		473.76		Manual Road to Harij	. 21.37)	(	88.40
Special (2' 6" and 2' 0") gauges—	72 28			Nawat to Siwai Medhopur		40.65)	
(viii) State lines worked by companies (ix) Assisted companies' lines receiving	g land		(viii) F	uruha-Banchi (2' 6") hahdara (Delhi) Saharanpur Light (2' 6",			72.28
only from Government .	. , 83.00			Shahdara to Saharanpur Dholpur-Bari (2' 0")—		: - :	95 00 19 <b>26</b>
(x) Native State lines worked by States	19-25	*00 #0		Easlern Bergal—			
		186.53	i	Punchooria to the Ganges river (a) . Nuglia-Mutira		. 6'00'ך	
TO	TAL .	832.02	i i	Katah ta Barun Kotah ta Muttra	40°00 (	245.48	
		· ·	(xi) {	North Western— Kacha Garhi to mile 23	. 23:00		
Leaving the undermentione	d lines for c	omple•	1	Lodhran to Khanewal Bhorket Read to Chicheki	. 130 80	240.99	609.95
ion in 1903-1909 or later:—			į.	Thal to Parachinar Oudh and Robitkhand—	. 69.60,		
,	Miles. Miles.	Miles.	į	Balawau to Sitapur Rosa to Sitapur	. 37·12		
' 6 gauge-			{	Rengai-Nagpur Sici to Gurumaishini	. 44.00		
(xi) State lines worked by the	200.05		- 1	Vizianagram to Raipur East Indian-	310.03		İ
State	. 609.95		}	Barbarwa to Katwa	. 99 14	ĺ	
(xii) State lines worked by com-	. 608.78		(-11)	Bomehuck to Bedepur Chard lin between the East Indian and	. \$.50		
panies		1,21873	(xil)	Oudh and Robukhand State Raniways near Moghal Sarsi Chat fine to Dhohan	. 1.19	218.10	605'75
' 3 g" gauge			Į	Ghat line to Sujimpara Hooghly to Katwa	2.20 65.20	1	
(xiii) State lines worked by the	. 191.37		i	Mile 1704 from Howah on the Jhazia branch to Chandore	. 4:16	İ	Ì
(xiv) State lines worked by com-			Į.	Toposi to Baraboni	. 931	j . 36 <sup>.</sup> 08,	}
panies	. 135.62						
(xv) Assisted companies' lines-			(xui)	Eastern Rengal— Bijut to the Brahmanutta river opposite C	laghati	. 80:37	191-37
A. Subsidized by Local Gov-				Kathur to Godagari		. 108.00	,
ernments	8.20		i	Assam-Bengal— Kalauta to the Khoos-ara river Burma—		. 16-00	}
B. Receiving land only from	59-80		i	Neikban to Reguyet Thansaing to Malagaon	. 66.28 . 670	3 ,,,	
Government	68 30		(xiv)	Kurnool Read Kurnool		. 33.00	} 195'61
Special (2' 6" and 2' 0") gauges—		395 29	!	Fortion of the Rameswaram extension Tangachunadam to Port Ampihil	3 17		1
(xvi) State lines worked by the			ļ	Tiruppachettal to Sivagunga	. 900	-	ļ
State	6.80	•		Blisgalpur-Kachery to Bhagaipur  A Dibru-Sadya-		. 0.79.	•
(xvii) State lines worked by com-	. 244.54	,		Tulup to Saikhoa Ghat B. Fengal and North-Western—			8.80
(xviii) Assisted companies' lines			(.	Burbwal to Sitapur		• • •	59.80
A. Subsidized by District	10.50		(ZV1)	Jullandur-Kaparthala-Sulmapur (British section) Jullandur to the British Frontier (c) .	-		
Boards	12.50		٠,	Gondia-Changa (2' 6")-	• •	•	. 6.60
B. Receiving land only from Government	49'50		(avii)	Gordia to Chanda (5) . Paugi (Biahmspuri) to Nagpur (6) .	. 148°65 . 63 75		}
	62.00	•	,/	Jubbulpur-Gondia Extension (2' 6')— Nainpur to Mandia		. 9014,	\$ 244.51
A. Worked by Native States	25 39		í	A Hoursh-Amia Light (2'0')-			
B. Worked by companies	6 .89		(svii)	Autpur to Cheminalanga (b) Autpur to Rajbuthat (c) Dwara Therra Light (2' "")—	: :	3.60	} 12 60
C. Worked by State railway	00.00		}	Dwara to Manleng (J)  B. Manleng to Therris that (b)	. 13.50		<b>,</b> •
agency	22.02	)	,	Shahdara (Delhi) Saharanpur Light (2'6") Barant to Meerut	-	30 00	49:50
		427.13	,	'A. ('ntch (2' 6")-	•		
	TOTAL .	2.041.15	i	Anjat to Bhuj  B Gwalior Light (2' 0") —	• •		26-38
	-			Sahaigarh to Shiapur . C. Juliundur Kapurthala-aultanpur (Native State	section) -	• • •	66.99
				Sultanpur to the British Frontier .c) .			201

<sup>(</sup>c) Constructed but not worked.
(b) Commencement of work but authorized.
(c) Commencement of work but authorized and question of gauge not finally settled.
(d) Completion deferred.

### APPEN X 41.

No. 514 R. C. of 1896.

GOVERNMENT OF INDIA.

#### PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

Simla, the 17th April 1896.

Terms on which the Government of India are prepared to consider offers for the construction by the agency of private companies of branch lines forming feeders either to State lines worked by the State or to railways worked by companies.

#### Read-

Public Works Department resolution No. 914 R.C., dated 15th September 1893. Public Works Department resolution dated 29th March 1895.

Observations —Many of the applications made under the above resolutions show that the terms for the construction of branch or feeder lines of railway have not been fully understood.

The Government of India have accordingly resolved to cancel the previous resolutions above quoted upon this subject, and to issue a fresh resolution embodying a summary of the concessions which (the previous assent of any railway company concerned having been first obtained) they are now prepared to give for the construction of branch or feeder railways, such concessions being usually confined to lines not exceeding 100 miles in length.

2. It should be clearly understood that those concessions are not applicable to the larger or more important railways or to mountain branches, for which separate negotiations are in all cases necessary.

RESOLUTION.—Branch lines forming feeders, whether to State lines worked by the State or to railways worked by companies, will ordinarily be made by the main line administrations who shall have a prior right to construct them.

The Government of India will, from time to time, publish a list of branch lines for the construction of which they are prepared to receive tenders.

They will consider and dispose of any application for the inclusion in the said list of any other line which can properly be described as a branch or feeder line, and which does not, except in special circumstances, exceed 100 miles in length.

- 2. Proposals for the construction of branch lines under this resolution must conform to the following terms and conditions:—
  - (i) Applicants must satisfy the Government that they are in a position to command substantial financial support.
  - (ii) The gauge to be adopted must be approved by the Government in each case.
  - (iii) The proposed railway shall be subject to the provisions of all Acts of the Legislature applicable to Indian railways.
  - (iv) The proposed railway shall be built in accordance with the fixed and moving dimensions for the time being prescribed by the Governor General in Council, and on plans and estimates that have been approved by that authority. The route of the line, the situation of stations, and other similar details shall be subject to approval by the Government.

### APPENDIX 41-contd.

- (v) The line, while under construction, shall be inspected when and so often as an inspecting officer appointed for that purpose by the Government may consider desirable with a view to ensure the construction of the line up to the standard agreed upon.
- (vi) Inasmuch as these railways are chiefly required for the development of country hitherto delicient in means of communication, and the anticipated profits may not therefore at once be fully realised the Government of India are prepared to give financial assistance as set forth below. Proposals for financial concessions may be made in one or other of the following alternative forms:-
  - Under (a) the company will receive an absolute guarantee of interest at a rate not exceeding 3 per cent, and a higher return if the not cornings of the branch are sufficient to pay mere than the guaranteed dividend.

(a) It may be stipulated that, after the opening of the railway for traffic, the Government shall guarantee out of the revenues of India a fixed yearly minimum dividend in rapees

on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, with such share of the surplus net profits as may be agreed upon. The minimum dividend to be guaranteed in each particular case will depend upon consideration of the circumstances, but for the present no offer will be entertained that requires a guarantee exceeding 3 per cent.; or

Under (b) the company will receive a dividend of 3) per cent, provide t that the amount of the net enryings from local and interchanged traffic be sufficient, and a higher return it the net earnings of the branch from its own traffic be sufficient to pay a

(b) It may be provided that a payment be made to the branch company by the main line to the extent necessary, together with the branch company's share of branch earnings [see section (6) of paragraph

3] to give the branch company a dividend of 3\frac{1}{2} per cent. per annum on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, provided always that the payment so made to the branch company shall in no case exceed the not earnings of the main line from traffic interchanged with the branch. This rebate will be granted from the first earnings of revenue by the branch, such payment being calculated at the close of the year, payments on account, however, subject to adjustment, being permissible at the close of the first-half of each year. The net earnings of the main line from traffic interchanged with the branch are assumed to bear the same proportion to the gross earnings of the main line from such traffic as the net earnings of the whole system including the branch bear to the gross earnings thereof. If the net earnings of the branch line equal or exceed  $3\frac{1}{2}$  per cent. on the actual expenditure as above, the whole of such earnings will go to the branch company.

In either of the above cases, (a) or (b), if the capital is raised in sterling the capital to be entered in rupees in the company's books in India shall be the actual amount realised in rupees from time to time by the several remittances of funds to provide for expenditure in India, together with the sterling outlay from time to time in England converted into rupees at the average rate of exchange obtained by the Secretary of State for his remittances during the halfyear preceding that in which the outlay shall have been incurred, and the capital expenditure in rupees on which the interest is from time to time to be calculated for the purposes of the guarantee or rebate, as the case may be, shall be the total outlay whether in India or England up to any such time as thereto charged.

(vii) The general character of the supervision and control that will be exercised by the Government over the branch railway, apart from

### APPENDIX 41- contd.

- the provisions of the Railways Acts and the preceding provisions of this resolution, shall be as follows:—
- (a) No capital expenditure by the branch railway company will be allowed as between the Secretary of State and the company unless the prior sanction of the Secretary of State shall have been obtained. The company shall have no power to increase its share or stock capital without the sanction of the Secretary of State or to borrow money except within a fixed limit and on specified conditions.
- (b) The branch railway company, if required, shall keep capital accounts and statistics in forms approved by the Secretary of State; and shall render, free of cost, all accounts and statistics required by the Government. The accounts and books will be subject to audit on behalf of Government.
- (viii) Funds for the execution of new works, properly chargeable to capital, found necessary after the branch railway has been opened to public traffic shall be provided by the branch railway company. Such works and their cost shall be agreed upon between the branch railway company and the main line administration before they are put in hand. In the event of any difference of opinion arising between the branch railway company and the main line administration as to the necessity for and the cost of any new work, the matter shall be referred to the Director of Railway Construction as arbitrator, and his decision shall be final.
- (ix) The rates and arrangements in force on State railways in the matter of services rendered to all departments of the State shall apply.
- 3. The following are the principal additional concessions admissible for branch or feeder railways for the construction of which tenders may be invited:—
  - (1) The Secretary of State for India in Council, or the Government of India, respectively, will permit the charge of interest, at a rate to be agreed upon in each case, during construction to the capital amount of the railway under the terms of the Indian Railways Act of 1894 (57 and 58 Viet., chapter 12), or the Indian Railway Companies Act, X of 1895.
  - (2) The land required for the construction of the branch railway will be provided free of cost. Such grant shall not include land required for quarrying, ballast, brickfields and kindred purposes.
  - (3) Electric telegraphs and telegraphic appliances will be supplied and maintained by the Government of India at the usual charges for such works.
  - (4) The results of existing surveys will be made available free of charge. When desired, fresh surveys will be made by the Public Works Department\* of the Government of India of any branch railway on the applicants depositing the estimated cost thereof in a Government Treasury, on the understanding that no preferential claim to a concession is thereby established. If permission be eventually given for the construction of the line the actual cost of all such surveys, as well as of those made at the cost of Government, may be included in the capital cost of the railway. No responsibility will be accepted by Government for the accuracy of any survey, plan, estimate, or orther information supplied.
  - (5) The branch railway may be constructed by the main line administration, and will be maintained and worked by that administration, during the full currency of the contract to be entered into for the purpose, at a fixed ratio of expenses to earnings in each half-year. The ratio will, when the branch railway is of the same gauge as that of the working railway, usually be that obtaining on the whole system as from time to time existing,

<sup>\*</sup> These will now be made by the Railway Board.

### APPENDIX 41-contd.

including the branch railways, but will not exceed 50 per cent. of the gross earnings of the branch from all sources, and will be inclusive of charges for the use of the main line rolling-stock.

- (6) Such expenses on account of the Board of Direction of the branch line railway company as may be incurred with the sanction of the Secretary may be charged—
  - (a) during construction to the capital account of the branch line company;
  - (b) after opening, and until the minimum dividend under paragraph 2 (vi) (a) or (b) is received by the branch line company, as part of the working expenses to be "met out of the stipulated percentage of the earnings of the branch taken by the working railway; and
  - (c) thereafter out of the general receipts of the branch line Company.
- (7) Railway materials for the branch railway will be carried over State lines at the special rates prescribed for such materials belonging to State railways.
- 4. The Government of India reserve the right to purchase all such branch railways at the expiry of 21 years or at subsequent intervals of 10 years on 12 months' notice, the purchase price being 25 times the yearly average net earnings, not including rebate payments of the three years preceding the purchase, with a maximum price of 120 and a minimum of 100 per cent. of cost price on a rupce basis.
  - 5. The Government also reserve--
  - (i) the right to fix and vary from time to time the classification of goods, and maximum and minimum rates for each class of goods, as well as of passengers; and
    - (ii) a general control in respect to the number and timing of trains.
- 6. Applications for concessions to construct branch railways under the terms of this resolution should be submitted in the form prescribed by memorandum  $\Lambda$  hereto attached, to the address of the Secretary to the Government of India, Public Works Department.
- 7. Applications for fresh surveys to be carried out on the terms detailed in condition 3 (4) above should be submitted in the manner prescribed by Memorandum B hereto attached, to the address of the Secretary to the Government of India, Public Works Department\*.

The Governments of Madras, Bombay, Bongal, the North-Western Provinces and Ondh and the Punjab.

and Oudh and the Punjab.

The Chief Commissioners of the Central Provinces, Burma and Assam.

The Resident at Hyderabad. The Resident in Mysore.

The Agents to the Governor General in Central India, Bajputana and Balu-bistan.

The Consulting Enigneers to the Government of India for Railways, Calcutta, Lucknow and Assau.

The Accountant General, Public Works Department.

ORDER.—Ordered that this resolution be forwarded for information to the Local Governments and Administrations and to the Officors marginally noted.

Also that it be published for general information in the Gazette of India.

W. S. S. BISSET, Col., R. E.,

Secretary to the Government of India.

#### Documents accompanying.

Enclosure No. 1.—Memorandum A for the guidance of persons or syndicates desirous of submitting proposals for the construction of branch or feeder railways, with form A and Appendices A, B and C.

Busine No. 2.—Memorandum B for the guidance of persons or syndicates desirous of having surveys made for branch or feeder lines of railway at their expense by the Public Works Department.

### APPENDIX 41-contd.

Enclosure No. 1 (with Form A and Appendices A, B and C) to Government of India resolution No. 514 R. C. of 1896.

#### MEMORANDUM A.

For the guidance of persons or syndicates desirous of submitting proposals for the construction of branch railways in India forming feeders either to State lines worked by the State or to railways worked by companies.

- 1. All applications for leave to construct a branch or feeder railway in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.\*
- 2. All such applications shall be printed, and shall be drawn up, as fir as may be, in form A attached hereto, and shall spends—
  - (a) the company, person or syndicate by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share;
  - (b) all the termini, together with the names of all the principal towns from, through, into, or near which the rankway is intended to be constructed, as well as the names of each civil division and district to be traversed by the proposed alignment;
  - (c) the length, so far as known, of the proposed railway;
  - (d) the gauge, the weight of rails, etc.;
  - (e) the motive power to be employed;
  - (/) the maximum tells, rates, and fares proposed to be charged on the projected tailway;
  - (g) the proposals for working the railway when constructed; and if any agreement is under contemplation, or has been provisionally arranged with any existing railway administration under which the proposed line, when constructed, is to be leased out for working by such railway administration, the exact nature and terms of such agreement;
  - (4) any further information that may be required to enable Government to thoroughly unders and the scope of the proposals.
- 3. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed rankway delineated thereon, so as to show its general course and direction, and also by an estimate as correct as may be of the works proposed to be authorised.
- 4. When the applicants draw up their own detailed plans and estimates these domments are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.
- 5. Lists will be published from time to time of the branch railways forming feeders, whether to State lines worked by the State or to railways worked by companies, for the construction of which the Government of India are prepared to receive tenders. Copies of such lists can be obtained on application addressed to the Secretary to the Government of India, Public Works Department.\*
- 6. Upon written application to the Director of Railway Construction permission will also be accorded to inspect, at all reasonable hours, the detailed plans, sections and estimates at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch railways, the construction of which the Government is prepared to entrust to companies; and copies of such plans, sections, and estimates will be furnished, on payment of the cost of copying.
- 7. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

<sup>\*</sup> Such applications should now be addressed to the Bailway Board.

### APPENDIX 1.-contd.

### Form A.

To accompany all applications for leave to construct a branch or feeder railway in any part of British India.

	Nature of particulars to be specified.	Particulars.
1	The name of the company, person, or persons by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share.	
2	The termini, together with the names of all the principal towns from, in, through, or into, or near which the railway is intended to be constructed.	Reference to an appendix (vide appendix A) may be here given, if necessary.
3	The length, as far as known, of the proposed railway.	•
4	The gauge proposed and weight of rails, etc.	
5	The motive power to be employed.	
6	The maximum tells, rates, and fares, intended to be charged on the proposed railway.	Reference to an appendix (vide appendix B) may be here given, if necessary.
7	Details of any agreement which may have been provisionally arranged, or which it is desired to enter into, under which the proposed line, when constructed, is to be leased out for working to any existing railway administration.	Reference to an appendix (vide appendix C) may be here given, if necessary.
	Any further information that may be required to enable the Government of India to thoroughly understand the scope of the proposals.	

# APPENDE 41.-contd.

## Appendix A.

# Alignment of proposed branch railway.

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Principal towns and districts of	provinces thron	gh which the	projected railway	will pass.

Towns.	Districts or provinces.
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## APPENDER 41.—contd.

# Appendix B.

Schedule of maximum and minimum rates and fares intended to be charged on the proposed branch railway.

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	2nd clas		•	•	•	•	•	•	•		•••	•••
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											szimum. s per mile.	Minimum. Pies per mile.
Carriage	y											
	Single	carria	go .	•	•	•	•	•		•	***	4*4
							:	•			simum, por truck.	Minimum. Pies per truck.
	Two or	more	carrie	ges (	on on	e truc	k.	•	•		•••	•••
		٠									Jaximum per mile.	Minimum. Pies per milo.
Horses-												
	Single l	horse	•	•	•	•	•	•		•	•••	•••
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	Each	•	•		•	•					•••	•••
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	4th ,,	•		•	•	•	•	•	•	•	•••	***
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	lst ,,	•					•		:		•••	***
	Coal, ed	lible	grain,	and	other	low-r	priced	staple	s to	be		
			at spec				•	•	•	•	141	***

# APPENDIX 1.—contd.

# Appendix C.

	t has yet been arranged with any existing railway administrated branch railway is to be worked; but when completed, it is proposed.  Railway Company on the following terms:—  (i)
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	(iii), etc.,

## APPENDIX 1-contd.

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t has bee ofeeted b	n provisionally arranged with the Railway Company to canch railway, when completed, on the following terms:—
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	(ii)
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	(iii), etc.,
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## APPEND 1 41-concld.

Enclosure No. 2 to Government of India resolution No. 514 R. C. of 1896.

#### MEMOCANDUM B.

For the guidance of persons or syndicates desirous of having surveys for branch or feeder lines of railway in India carried out at their expense by the Public Works Department\*.

- 1. All applications for the survey of proposed branch or feeder railway routes in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.
  - 2. All such applications shall specify—
    - (a) the company, persons, or syndicate by whom the application is preferred;
    - (b) all the termini, together with the names of all the principal towns from, through, into, or near which the survey is intended to be carried, as well as the names of each civil division and district to be traversed by the proposed alignment;
    - (c) the length, so far as known, of the proposed railway;
    - (d) the gauge and the motive power to be employed;
    - (e) the intentions of the applicants as to the construction and working of the railway. If it is intended that the working shall be leased to any existing railway administration, the nature of the contemplated agreement shall be specified.
- 3, Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed survey delineated thereon, so as to show its general course and direction.
- 4. If the detailed plans and estimates are submitted to Government, these documents are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.
- 5. Upon written application to the Director of Railway Construction permission will also be accorded to inspect at all reasonable hours the detailed plans, sections, and estimates, at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch or feeder railways the construction of which the Government is prepared to entrust to companies; and copies of such plans, sections and estimates will be furnished on payment of the cost of copying.
- 6. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

There will now be carried out by the Railway Board.
 Such applications should now be addressed to the Bailway Board.

### APPROIX 42.

Communication between passengers and the guards and drivers of trains.

No. R. T. 861

#### RAILWAY BOARD.

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEFARTMENT, RAILWAY BRANCH.

THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE UNITED PROVINCES, AND EASTERN BENGAL AND ASSAM, PUBLIC WORKS DEPARTMENT.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE AGENT TO THE GOVERNOR-GENERAL FOR RAJPUTANA.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.

Simla, the 27th June 1906.

I am directed by the Railway Board to inform you that they have had under consideration the necessity for the provision of an effective means of \*communication between passengers and the guard and driver of the train, and after a very careful consideration they are of opinion that the type of such communication, which is now in general use in England, should be adopted on the railways in India.

2. The details of the type referred to will no doubt be entirely within the knowledge of the various railway administrations here, but a simple description of it is that—

A chain runs along both sides of the inside of each carriage just below the point where the roof meets the sides. The chain can be easily pulled by any passenger having need for so doing, and the effect of the chain being pulled is to open a small valve connected with the vacuum brake which simultaneously calls the attention of both the guard and driver by decreasing the vacuum and would in time stop the train by the application of the brakes. In addition to opening the valve above referred to, a disc at the outside corner of the carriage is actuated. The normal position of this disc is at right angles to the side of the carriage in a horizontal plane, that is edge on. When actuated by the pulling of the chain the disc revolves into a vertical position, and can be seen from either end of the train and locates the carriage from which the alarm has been given. The system has been found to work in England most satisfactorily and is, comparatively speaking, inexpensive.

- 3. The Railway Board have, therefore, given orders to the three Stateworked railways, viz., North-Western, Oudh and Rohilkhand, and Eastern Bengal, to at once apply this means of communication to all new and re-built stock for all classes of passengers, and in addition the communication will also be fitted to all existing stock of all classes as rapidly as possible.
- 4. It will be readily understood that in a matter of this kind unformity, which also means interchangenbility between all classes of stock of the same gauge, is a vital necessity and as the type of communication approved by the Board has stood the practical test of experience satisfactorily, they desire that the type shall be made universal so far as the railways in India are concerned.

# APPENDITE 2-concld.

5. The Railway Board consider the provision of an effective means of communication between passengers and guards and drivers a matter that affects the safety of the public travelling by railways, and under Section 62, Chapter VI of the Indian Railways Act of 1890, they require all railways to adopt the above type of communication on all classes of their carriages now under construction or to be built either as additions or renewals, and that such type of communication be fitted to all existing carriages of all classes within two years from the date hereof.

No. R. T.  $\frac{351}{8}$ , dated Simla, the 27th June 1906.

Copy forwarded to the Managers, North-Western, Oudh and Rohilkhand, and Eastern Bengal State Railways, for information and necessary action.

### APPENDIX 43.

Rules for the design and inspection of Signalling and Interlocking.

No. R. S. 87-3. RATT WAY BOARD.

- 1. THE CONSULTING ENGINEERS FOR RAILWAYS, MADRAS, BOMBAY AND BURMA.
- 2. THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS. CALCUTTA AND LUCKNOW.
- 3. THE MANAGERS, NORTH-WESTERN, OUDH AND ROHILKHAND AND EASTERN BRIGAL STATE RATIONAVO

Simla, the 17th August 1906.

Senior Govt. Inspector's No. 1506, dated your No. 890, dated With reference to correspondence ending with Senior Govt. Inspector's No. 2404-70-C.R., Senior Govt. Inspector's No. 1092, dated No. 381-T., dated your

11th April 1905. 2nd Murch 1905. dated 1st December 1905. 6th March 1905. 18th January 1905.

I am directed to forward herewith a set of rules for the design and inspection of Signalling and Interlocking, and to say that the object in compiling these rules is to guide signalling manufacturers in meeting the requirements of Railway Administrations and Government Inspectors in passing the installations put up for ensuring safety to traffic. These rules take the place of the orders which were issued in Director of Railway Construction's No. 251-R.S. dated 17th February 1902, and Rules referred to in questions 47 and 50 ir Form IX mentioned in Chapter II, Section (2) of the Rules for the Inspection of Railways prior to opening.

2. I am accordingly to say that the Railway Board authorise their adoption and will take the opportunity to include them in the next edition of the Rule for Inspection of Railways prior to opening.

Documents accompanying.

Set of Rules referred to.

# APPENDE 43-contd.

#### SIGNALLING AND INTERLOCKING.

### SECTION I.

The following conditions are essential to any system of interlocking.

- 1. It shall not be possible to lower conflicting signals, at the same time.
- 2. Warning Signals, Home Signals, Routing Signals, and Starting Signals, where provided, shall be interlocked with the points in the station, so that it shall not be possible to lower any such signal until—
  - (i) all points on the running road are properly set,
  - (ii) all facing points on the running road are locked by a lock fixed at the points,
  - (iii) all points giving access to the running road from sidings and goods lines are so set as to prevent the running road being fouled,
  - (iv) level crossing gates, if controlled, are locked across the roadway.
- 3. With reference to rule 2 above, the lowering of the Signal shall prevent—
  - (i) the position of any of the points or traps referred to being altered, or
  - (ii) any facing points or gates being unlocked, until the Signal is again put to danger.
- 4. When all signals are at "Danger," all points, which would be locked by the lowering of such signals, must be free for shunting purposes.
- 5. The arrangement of Facing Point Locks must be such that the points cannot be or become unlocked whilst a train is passing over them.
- 6. Facing Points which cannot be protected by trap switches from being burst trailing, must be detected each time the Home Signal is lowered.
- 7. It must be impossible to lower a Warner until all Main Line Signals in advance have first been lowered, the lowering of the Warner must back lock such signals except that when the Outer is worked from the points and the Warner from the cabin or platform, the Warner need not back lock the Outer.
- 8. When the Outer Signal is worked from the points and the Home Signal from the cabin or the platform, it shall not be possible to lower the Outer until the Home has been lowered, and the lowering of the Outer shall not back lock the Home. The arrangement must be such that when the Home is put back to danger the Outer shall be automatically returned to danger. Except that if desired, arrangements may be made to allow of the interlock between the Outer and Home Signals being released, under the control of the Station-Master for the purpose of bringing a train up to the Home Signal.
- 9. Points and Facing Point Locks must be worked by rodding and not by wire of other flexible connection.
- 10. The normal position of every signal shall be at danger, except in the case of Calling-on arms, and no Signal shall be used unless it is constructed to stand at, or return to, the normal position in case of failure of any part of its connections.
- 11. The arrangement must be such that the control effected by the interlooking cannot be vitiated even if a signal wire be out of adjustment or forcibly stretched.
- 12. The locking in a lever frame must act as soon as a lever is moved, and release must not be effected until it reaches the end of its travel.
- 13. All Facing Points must be fitted with an efficient gauge tie bar at the nose of the switches and be provided with double stretcher bars.

It is desirable that the following conditions should be complied with.

- 14. The design of a station yard should be such as shall, where possible, provide for the isolation of running roads from each other, and from all sidings and goods lines. But where the connection of sidings and goods lines with a running road is direct, and no other means, therefore, exists of denying access to such running roads to vehicles on a siding, traps must be provided on the siding and shall be treated as points as in rule 2 (iii) above. Such traps shall be protected by signals or indicators, and shall be fixed at a sufficient distance short of the fouling point, and in such a position as regards the side of the track on which they are fitted, as shall ensure that an engine or vehicle derailed at the trap shall not foul the running road. An efficient derailing scotch block shall be considered a trap for the purpose of this rule. For the purpose of this rule and of Rule 2 above all loops or lines which are not signalled for running trains shall be considered as sidings.
- 15. Except where duly qualified Cabinmen are employed the Station-Master must be provided with an efficient control, so that it shall be impossible for any signal controlling the movements of trains approaching or leaving the station, to be lowered without his consent and co-operation. In the case of crossing stations on Single Line no mechanical control shall be considered efficient unless it provides for the independent control of each of the Home Signals.
- 16. When Signals are fixed some distance in advance of Facing Points to which they refer, the arrangement should be such as to render it impossible, within reasonable limits, to put the Signal to Danger behind a train and then unlock the points before the train reaches them.
- 17. The act of putting the Warner to Dauger must not release the trailing points at the far end of the station.
- 18. The counterweights of Signals should be fixed high up the post out of reach, unless the arrangement is such that the signal cannot be lowered by raising the counterweight.
- 19. Ordinary Facing Point Locks shall be provided with a treadle bar of greater length than the greatest distance between two consecutive pairs of wheels in a train. Such bars to rise level with the top of the rail in the case of inside treadle bars, and at least one inch above it in the case of outside bars, in the centre of the travel.
- 20. All Facing Points, the locks of which are actuated by separate levers and which are locked in either position, shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction.
- 21. All Facing Points which are worked and locked by the same lever shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction.
- 22. When points are not locked from the place from which the signals are worked, the control by means of any detectors fitted to such points should extend to the locking arrangements as well as to the actuation of the points.
- 23. Except with the previous sanction of the Government Inspector, the following maximum distance at which points may be worked from the lever shall not be exceeded:—

Trailing Points, or Facing Points, worked by a separate lever ... 300 yards. Facing Points worked and looked by the same lever ... 200 yards.

- 22. Rodding must be properly compensated in all cases where the lead exceeds 80 feet.
- 25. In the case of Key-locked Facing Points the locks shall he so placed as to be inaccessible during the passage of a train over them unless the

### APPENDIM 43-contd.

arrangement is such that the key, being required for the release of the Signals, cannot be brought to the points when Signal is "Off" or for an appreciable time after it has been put to Danger.

- 26. Key locks where used must be connected to the track in such a manner as to ensure the necessary rigidity.
- 27. Important Signals should be fixed in such position, and at such height above rail-level, as will ensure their being alearly seen by Drivers, having regard to the nature of the background and relative height of Subsidiary Signals. Every Signal must, if possible, be visible from the Signal cabin or point from which it is worked, otherwise efficient repeaters should be provided.
- 28. All interlocking gear must be of strong and substantial construction. The apparatus must be such as can easily be maintained in an efficient condition under ordinary conditions of working.

#### SECTION III.

### Instructions regarding Signals and Interlocking gear generally.

#### Locking frames and cabins.

- 29. The locking in a frame should be compactly arranged, and should not occupy such space in front of the levers as will prevent the calimnan having the best possible view of the railway, nor such space at the back as will prevent him standing well up to the levers. The locking should be easily got at for cleaning, lubricating, alterations or repairs, as far as possible without interfering with the working of the frame. There should be as few wearing parts as possible, and all parts should be interchangeable. The frame should not only be effective in working, but should be strong, durable, as simple as possible in construction and capable of extension it required.
- 30. The levers should be painted with distinguishing colours, and each lever in addition to its own number should bear the numbers of the levers which must precede it, in the proper order. In the case of tappet locking the arrangement must be such that no lock can enter a notch other than that for which it is intended. A sufficient number of spare levers should be provided.
- \$1. When points and signals are worked from signal cabins, these should be at such height above rail level as will ensure the Signalman having a good view of the points and signals under all conditions.
- 32. The fixed lights in signal cabins should be screened off so as not to show in the direction of approaching trains.
- 33. Each signal cabin should be provided with a clock and with a proper diagram showing the arrangement of points and signals worked from the cabin in their normal position, with their numbers.

#### Signals. 4

- 34. Signals shall be used whenever and wherever they are ordered by special instructions.
- \* 25. Every Stop Signal shall be fixed at the point at which it is desired the train to which it refers shall stop.
- 36. A signal arm shall be placed on the left hand side of the post as seen by the Driver of an approaching train to which such signal refers.
- 37. Signals shall be fixed on the side of the line on which they can best be seen by Drivers of approaching trains, but the left hand side of the track is to be preferred unless the sighting is greatly interfered with.
- 38. Signal arms shall be painted red with a white bar on the side facing trains to which they refer, and white, with a black bar on the other side. On Warning Signals the bar is to be parallel with the notching.
- 39. Signal arms referring wholly to lines which are not used for passenger traffic may be distinguished by rings.

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- 40. Signal arms not in use shall be distinguished by having two crossed bars attached to them, and must remain fixed at Danger.
- 41. Where two or more lines diverge, the Signal shall be fixed on a bracket post.
- 42. Where two or more lines converge, the Signals shall, where possible, be fixed on separate posts.
- 43. But in both the above cases, where the number of Signals is considerable, they may be fixed on separate posts or dolls carried on a signal-bridge provided for the purpose.
- 44. In the case of all bracket or bridge signals, the left hand Signal shall refer to the left hand road, the second Signal from the left to the road next the left hand road, and so on.
- 45. Signals on brackets and bridges shall be distinguished as much as possible by grouping and by making the more important Signals higher than the less important.
- 46. Signals referring to parallel tracks should as far as possible be arranged in transverse line.
- 47. Signals should be so fixed that the distance between the lamps of adjacent Signals shall in no case be less than 6 feet, except in the case of platform starting, or other subsidiary Signals.
- 48. Not more than one Signal referring to trains moving in the same direction (whether on the same track or on separate tracks) shall be placed on the same post, unless—
  - (a) there be only two Signals on the post and the lower Signal is a Warner fixed from six to seven feet below the other Signal, or
  - (b) the lower Signal is a Co-acting Signal or Calling-on Signal fixed at least fifteen feet below the next Signal, or
  - (c) the sanction of the Government Inspector has been obtained.
- 49. Important Signals should ordinarily have the arm not less than 24 feet above rail-level, and should conform to the following minimum dimensions:

(i) length of arm from spin	dle	•••	•••	4	l' 8"
(ii) width of arm	•••	••	•••	•••	10"
(iii) diameter of front lens	•••	•••	***	***	5"

- 50. Platform or loop starting Signals, and subsidiary Signals generally shall have a short arm fixed, as a rule, not more than 18 feet above rail level.
- 51. Pulleys for wire must be of such construction that the wire cannot be jammed between the pulley and bracket.
- 52. Lofty Signals, or Signals in exposed situations, should be guyed; means for adjustment of guys should also be provided.
- 53. Signal connections should be of approved pattern galvanized strand or solid steel wire. The stakes for carrying wire should not be more than 36 feet apart. Junctions of wire with chain or shackles to be made with thimbles.
- 54. Every angle wheel should be provided with not less than 3' 6" of chain (not less than \frac{1}{4}"), the ends of chains to be provided with split links.
- 55. Signal wires should be provided with adjusting screws, but where the lead exceeds 1,000 ft. an efficient regulator to be provided, placed so as to be within easy reach of the man working the signals.
- 56. Electric Signal Repeaters where provided should be of the three position type.
- 57. The Front lenses of subsidiary Signals, and the back lights of all Signals, are to be as small as possible consistent with efficiency.

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- 58. (1) Every fixed Signal, the signt of which cannot be seen from the point from which the Signal is worked, must be provided with a back-light or tell-tale, by which the Station-Master may see whether the light is burning or not.
- (2) Back-lights of Signals milks show a small white light when "on" and no light at all in any other position.
- (3) When a Warner is used by itself, its fixed green light must show a white back-light.
- 59. The lamps of all Signals should be fixed and ladders provided for lighting and cleaning them. Except under special instructions the front speciale frame must be rigidly attached to, and work on the same spindle as the Signal arm.
- 60. Miniature and Dwarf Signals used to control shunting shall show the same front and pack-lights as are prescribed for Signals, but front lenses shall not be more than 3" diameter or back lenses more than 1\frac{1}{2}" diameter
- 61. Point indicators shall show a white light for the straight and green for the turn-out in both directions.
- 62. Point indicators used to protect and indicate the position of traps shall show a red light in front when the trap is open and green when it is closed; back-lights, white warm the trap is open, green when the trap is closed.

#### Poin's.

- 63. Facing Points should be avoided as far as possible, but when they cannot be dispensed with they must be placed as near as practicable to the levers by which they are worked or locked.
- 64. Adjusting cranks should be used on the last connection to each pair of points Facing Point Lock, or other apparatus worked by rodding.
- 65 Travelling rollers of approved pattern should be used for all rodding connections and be fixed not less than 7 feet apart.
- 66. An adjusting screw or turnbuckle should be provided in each rod connection.
- 67 Where detectors are used it must not be possible for a detector slide to enter a notch other than that which it is intended for.
- 68. The keys used in key-locking should be of such a size as to minimise the chance of their being mislaid or broken.

#### SECTION IV.

#### Instructions for Government Inspectors.

When inspecting an interlocking installation, the Government Inspector must satisfy himself upon the following points:—

- 1. That the locking in the frame corresponds with that shown on the locking table.
- 2. That the diagram correctly represents the arrangement of the yard, especially as regards the normal position of points.
- 3. That before any Signal can be lowered, the running road to which it refers must be correctly made and locked, and that after the Signal has been lowered, no points or traps giving access to that road from sidings can be moved so as to allow the running road to be fouled.
- 4 That conflicting Signals cannot be lowered at the same time.
- 5. That all Signals are visible from the cabin or frame, or are provided with efficient repeaters.
- 6. That the Signalman has a good view of all points worked from his cabin.

### APPEND 43-concld.

- 7. That Signals come fully when lowered, and return freely to the danger position.
- 8. That when there are slotted or controlled Signals, the Signal can be returned to danger freely, by either of the levers by which it is controlled.
- 9. That in the case of a stop arm controlling a Warner below it, the Warner cannot be lowered unless the upper arm is "off," and that when the upper arm is put to danger the Warner, if "off" returns feely to danger, as well as the upper arm.
- 10. That Facing Point Locks are so set that the insertion of a 13 inch rod between the switch and stock rails, 6 inches from the nose of the former, prevents the points being locked.
- 11. That Facing Point Lock Plungers when withdrawn, clear the Stretcher blade by not more than 1 inch, and that the stroke of the plunger is not less than 6 inches.
- 12. That all switch and lock movements are adjusted to make full travel and require a lever to spring connections slightly before it is fully home.
- 13. That switches are adjusted to come tight against stock rail.
- 14. That when detectors are fitted each switch ratio detected independently either by separate detector blades or by means of a floating lever. Except that where a Facing Point Lock locks each switch independently separate detector blades are not necessary.
- 15. That treadle bars are of proper length as laid down in the rules given above, and rise to the full height in the centre of the travel.
- 16. That all cranks, locks, detectors, compensators, wheels, etc., are securely fixed to substantial bases fixed in concrete or attached to the sleepers.
- 17. That rod rollers are attached to timber east-iron or stone blocks, or branches, let sufficiently into the ground to secure the recessary rigidity.
- 18. That leading off gear of cabins is securely fixed to heavy timber or concrete.
- 19. That proper rules or instructions are provided for working.
- 20. No Interlocking Installation shall be passed by a Government Inspector unless the conditions laid down in Section I are fully complied with. But unrestricted speed through stations should not be allowed unless the conditions specified in Section II are complied with as well. It will be open to the Government Inspector to impose a restriction, if he judges it to be necessary, in cases where any of the Rules laid down in Section III have not been complied with.